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DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE

BLUE ROCK COUNTRY CLUB PROJECT

SCH Number 97072028



Prepared for
THE CITY OF HAYWARD

by

WAGSTAFF AND ASSOCIATES
Urban and Environmental Planners

September 1997

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SCH Number: 97072028

Prepared by

WAGSTAFF AND ASSOCIATES
Urban and Environmental Planners

in association with

Barton-Aschman Associates, Inc., Transportation Planners and Engineers
Questa Engineering Corporation, Civil and Environmental Engineers
Baseline Environmental Consulting, Geologist and Hydrologists
Monk & Associates, Biologists
Orion Environmental Associates, Noise and Air Quality Consultants
Environmental Vision, Visual Simulation Consultants

September 1997

Table 1

BASIC PROJECT DATA

PROJECT NAME:	Blue Rock Country Club Project		
SITE LOCATION:	Southeast of Fairview Avenue/Hayward Boulevard in eastern Hayward on Walpert Ridge		
SITE AREA AND OWNERSHIP:	Hayward 1900 property:	1,558 acres	
	East Bay Regional Park District property:	20 acres	
	<u>Roman Catholic Bishop of Oakland property:</u>	<u>57 acres</u>	
	TOTAL:	1,635 acres	
EXISTING LAND USE:	The site is currently used for cattle grazing, and also contains one unoccupied housing unit and a PG&E electrical transmission line.		
PROPOSED LAND USE:	650 single-family housing units, 18-hole golf course, golf clubhouse, tennis/swim club, 11.3-acre joint school/park site.		
PLANNING JURISDICTION:	The site is located within the City of Hayward.		
REQUESTED APPROVALS:	Currently requested approvals consist of (1) <u>City of Hayward General Plan</u> amendment to redesignate the area within the <i>Urban Limit Line</i> (315 acres) from <i>Residential, Suburban Density (1.0 to 4.3 dwelling units per net acre)</i> to <i>Residential, Low Density (4.3 to 8.7 dwelling units per net acre)</i> ; (2) various <u>Walpert Ridge Specific Plan</u> amendments; (3) rezoning of 585 acres from AG (Agricultural District) to PD (Planned Development District); (4) Preliminary Development Plan approval; and (5) execution of a Development Agreement between the City of Hayward and Hayward 1900. The applicant intends to submit a vesting tentative map application in the future.		
APPLICANT:	Hayward 1900, Inc.		
SOURCE:	Wagstaff and Associates, 1997.		

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I. INTRODUCTION

I. INTRODUCTION

A. SUPPLEMENTAL EIR PURPOSE AND APPLICATION

The project applicant, Hayward 1900, has submitted an application for development of the Blue Rock Country Club project in a portion of the Walpert Ridge area in eastern Hayward. In 1980, the city of Hayward adopted a specific area plan for Walpert Ridge. This plan was replaced in 1991, when the City certified an Environmental Impact Report (EIR) and approved a revised specific area plan for the Walpert Ridge area. The 1991 specific area plan was superseded by the City's adoption, in 1995, of the Walpert Ridge Specific Plan and an accompanying negative declaration. No urban development has occurred in the specific plan area during this time.

The City has determined that the currently proposed Blue Rock Country Club project is not exempt from the California Environmental Quality Act (CEQA), and that the project triggers the requirement for preparation of a Supplemental EIR. To meet this CEQA requirement, the City has also determined that changes or additions to the 1991 certified Walpert Ridge Specific Area Plan EIR will be necessary to make the EIR adequately apply to the proposed project, and that CEQA compliance shall be achieved by preparation of a supplement to the certified 1991 EIR. This document, known as a *supplemental EIR* pursuant to CEQA (particularly Public Resources Code Section 21166 and State CEQA Guidelines sections 15160 and 15163) describes any substantive changes in project environmental information that have occurred since preparation of the 1991 EIR.

As used in this SEIR, the terms "Blue Rock Country Club project," "proposed project," and "project" refer to all aspects of the current development proposal, including all local, state and federal approvals, entitlements, and permits that may be required for development of the currently proposed project.

The City of Hayward is the Lead Agency¹ for all environmental documentation and procedural requirements for the Blue Rock Country Club project. This Supplemental EIR (SEIR) has been prepared by the City of Hayward pursuant to all relevant sections of the California Environmental Quality Act (CEQA). The report is intended to inform City decision-makers, other responsible agencies, and the general public of the proposed project and of the environmental consequences of its approval.

¹CEQA Guidelines define the "Lead Agency" as the public agency that has the principal responsibility for carrying out or approving a project.

CEQA Guidelines stipulate that an EIR is intended to serve as a public information and disclosure document identifying those environmental impacts associated with the proposed project that are expected to be significant, and describing mitigation measures and alternatives which could minimize or eliminate these significant adverse impacts.¹ Such impacts and mitigation needs are discussed in this SEIR to the level of detail necessary to allow reasoned decisions about the project and warranted conditions of project approval.

B. SUPPLEMENTAL EIR APPROACH

1. Need for SEIR

Public Resources Code section 21166 and State CEQA Guidelines sections 15163 and 15162 stipulate that when an EIR has been certified for a project, a *supplemental EIR* is prepared when the lead agency determines that the previous EIR will require revision due to new significant impacts or an increase in the severity of previously identified significant impacts due to:

- substantial changes in the project;
- substantial changes in circumstances under which the project is undertaken;
- new information that shows that there may be new or more severe significant impacts;
- new, feasible mitigation measures that were not previously considered.

The City has determined that one or more of these conditions may apply to the proposed Blue Rock Country Club project, and therefore preparation of this supplemental EIR is necessary. In this case, the currently proposed project includes a preliminary development plan for the project site that was not evaluated in the 1991 EIR, raising the possibility of new significant impacts and new, feasible mitigation measures not identified in the 1991 EIR. In addition, existing environmental conditions (e.g., traffic, public services, etc.) may have changed since the 1991 EIR was certified.

2. Relationship of SEIR to 1991 EIR

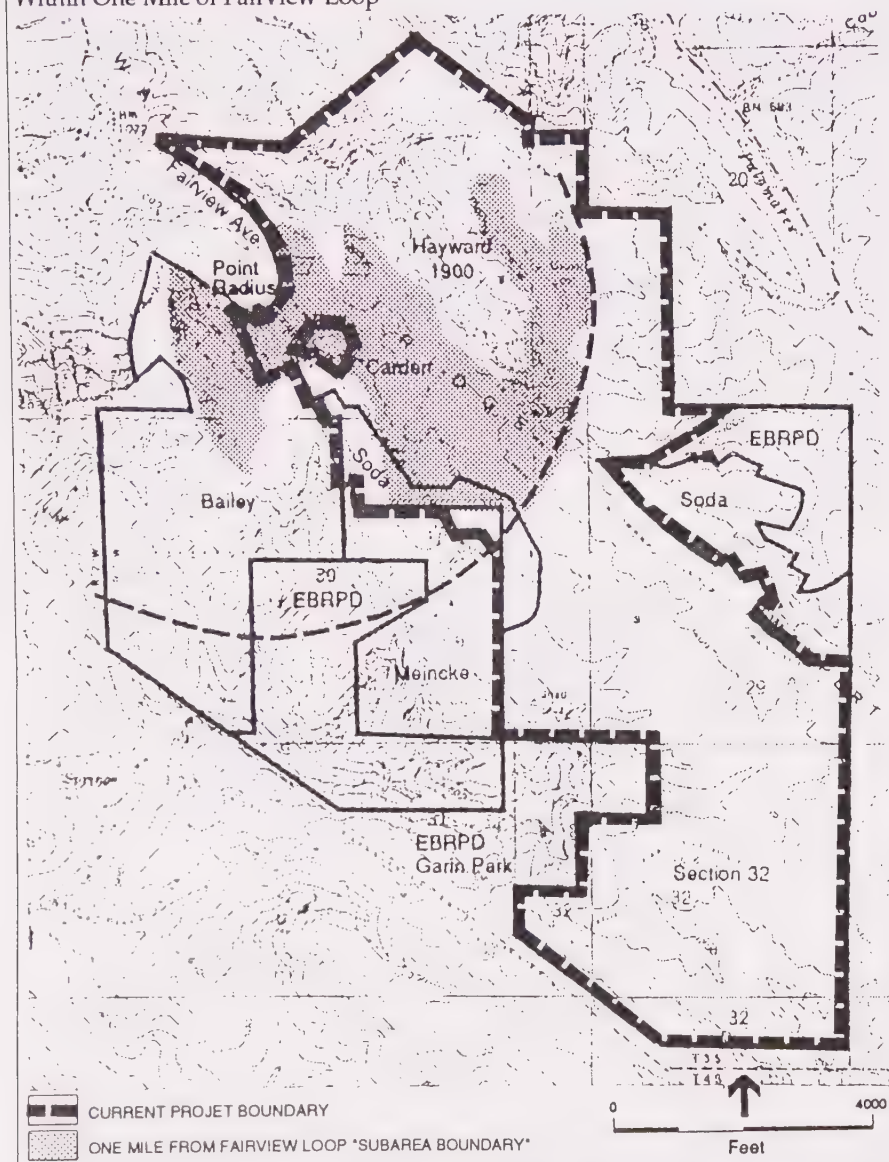
(a) Alternatives Evaluated in 1991 EIR. The 1991 EIR evaluated the following range of residential development alternatives for the Specific Plan area. Figures 1A through 1D illustrate the geographic configurations of these alternatives.

- (1) 500 housing units, to be developed in any of three subareas of the Specific Plan area: (a) the area extending one mile southeast from the convergence of Fairview Avenue and Hayward Boulevard (the Fairview Loop) (see Figure 1A); (b) Fire

¹CEQA Guidelines section 15149(b).

Figure 1

1A. Walpert Ridge Development Option Assumed Geographic Distribution. Within One Mile of Fairview Loop



Development Subareas Evaluated in 1991 EIR

1B. Walpert Ridge Development Option Assumed Geographic Distribution. Within Fire Station 5's Service Area (1.5 miles)

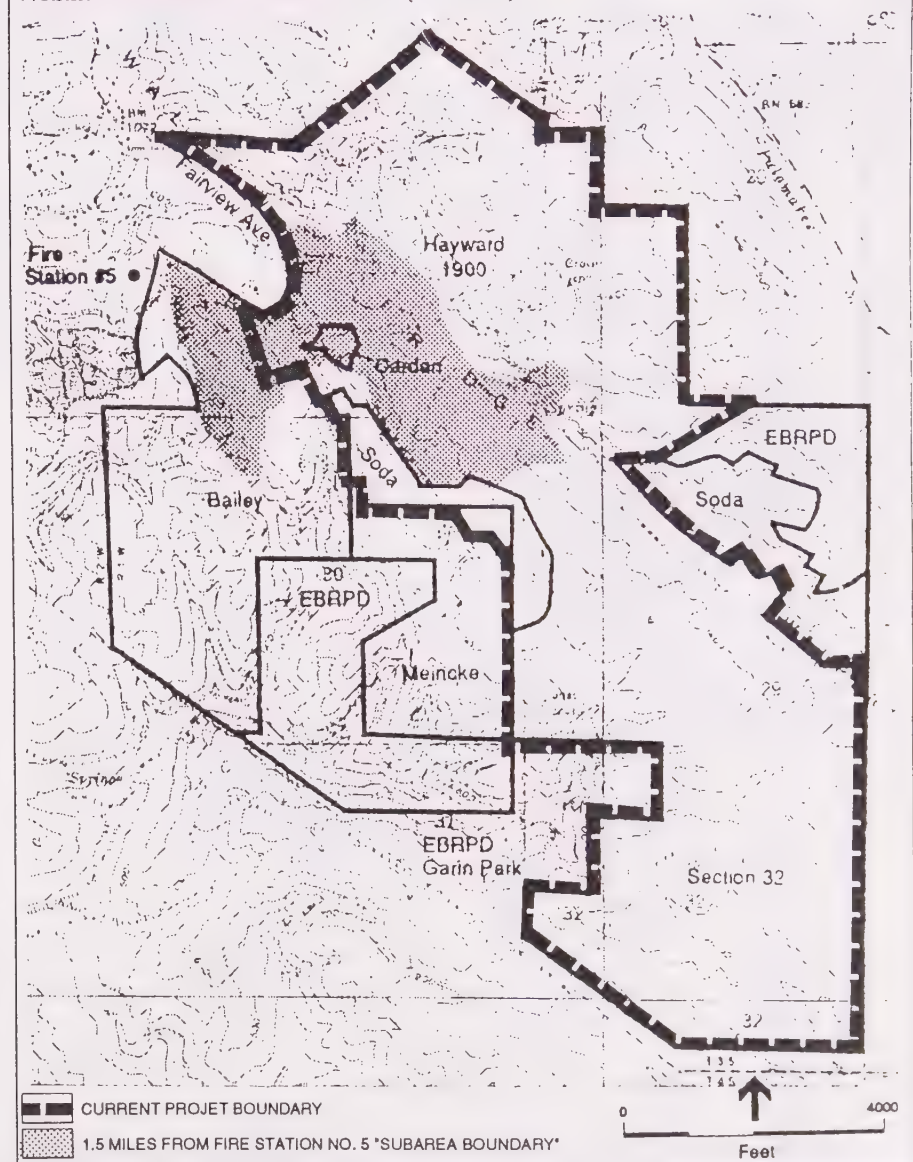
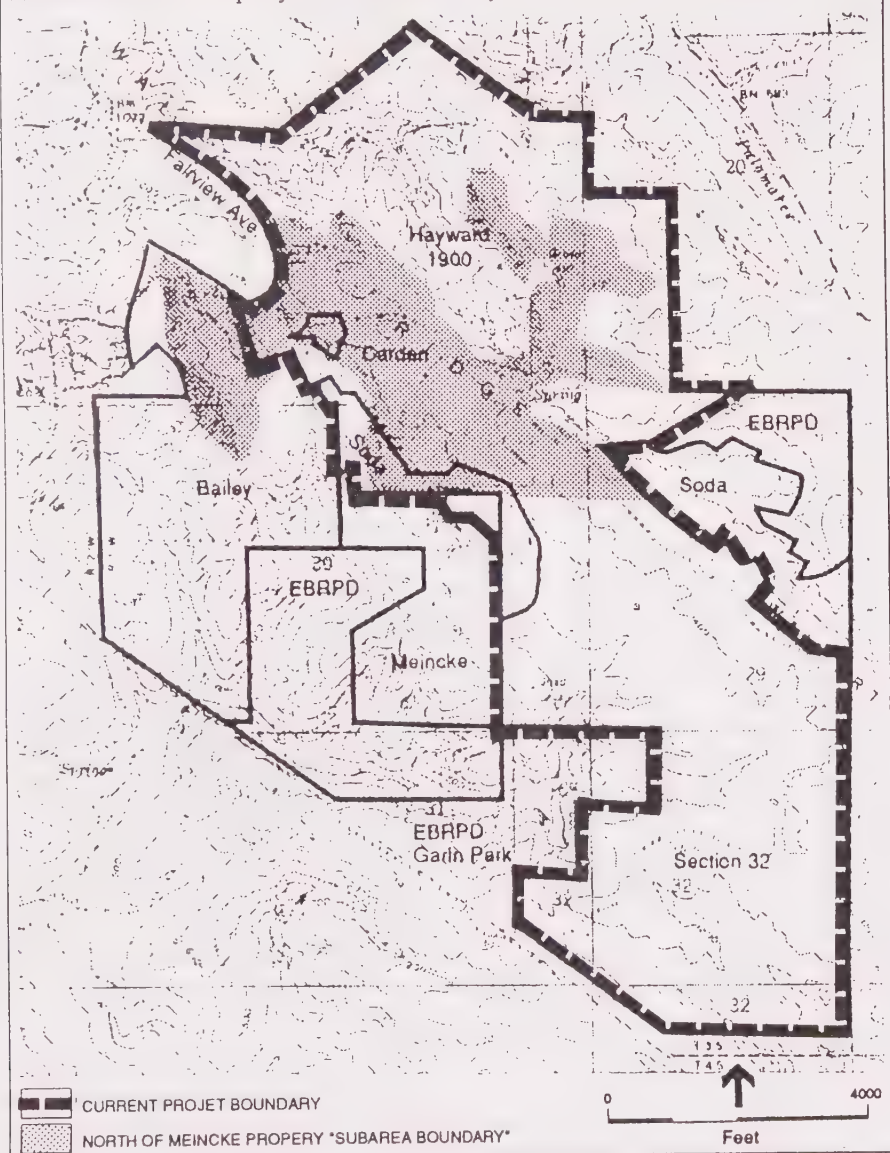


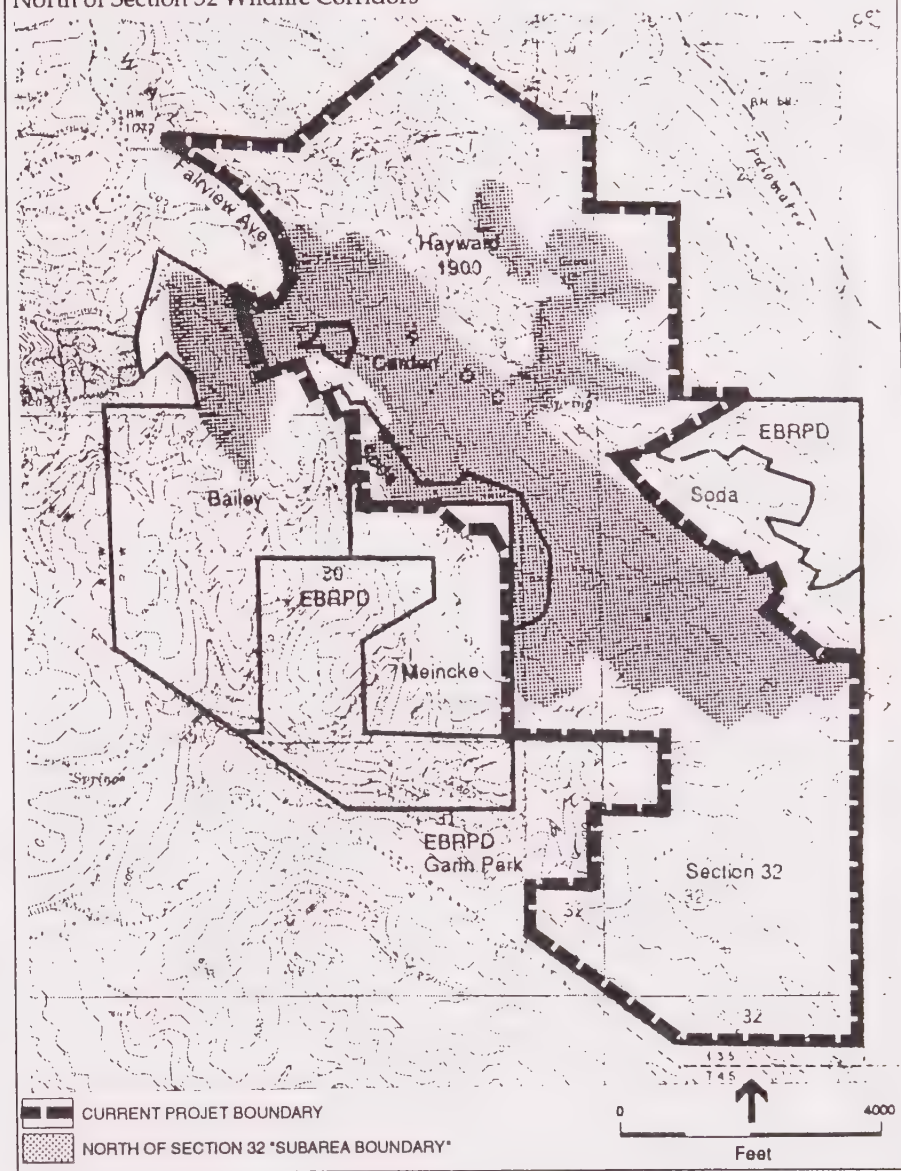
Figure 1

1C. Walpert Ridge Development Option Assumed Geographic Distribution.
North of Meincke Property "Subarea Boundary"



Development Subareas Evaluated in 1991 EIR

1D. Walpert Ridge Development Option Assumed Geographic Distribution.
North of Section 32 Wildlife Corridors



Station No. 5 service area, which extends approximately 1.5 miles southeast from the Fairview Loop (see Figure 1B); and (c) the area north of the Meincke property (see Figure 1C);

- (2) 700 housing units, to be developed in any of the three subareas described under item (1) above for the 500-unit alternative;
- (3) 900 housing units, to be developed in any of the three subareas described under item (1) above for the 500-unit alternative; and
- (4) 1,800 housing units, to be developed in the area north of the wildlife corridors in Section 32, extending approximately two miles southeast from the Fairview Loop (see Figure 1D).

While each of the four subareas described in items (1) through (4) above include portions of the Blue Rock Country Club project site, the portion of the site currently proposed for urban development corresponds most closely to the Fire Station No. 5 (1.5-mile) service area evaluated in the 1991 EIR. The level of development proposed by the project (650 single-family housing units), combined with other cumulative development anticipated in the Specific Plan area (155 housing units), totals 805 housing units, and falls between the 700-unit and 900-unit alternatives evaluated in the 1991 EIR. Therefore, as a means of relating the currently proposed project to the findings of the 1991 EIR, this SEIR focuses on the 1991 EIR conclusions regarding impacts and necessary mitigations for development of 700 to 900 housing units in the subarea located within 1.5 miles of Fire Station No. 5.

(b) Relationship of SEIR Analyses to 1991 EIR. The 1991 EIR (and prior EIRs for Walpert Ridge) analyzed "plan-level" development on Walpert Ridge (i.e., development of an estimated range of housing units and other uses based on generalized land use plans for the area). This Supplemental EIR focuses on "project-level" impacts that would result from development of the currently proposed preliminary development plan, which provides a more precise housing unit estimate for the project site along with street, lot, and golf course layouts and other details regarding site development. The Supplemental EIR also provides new analyses based on updated information regarding traffic, air quality, noise, and other environmental conditions. In section IV (Setting, Impacts, and Mitigations) of this Supplemental EIR, the discussion of impacts and mitigations begins with an indication of whether the impact and mitigation findings are intended to supplement or replace those identified in the 1991 EIR.

C. SUPPLEMENTAL EIR SCOPE--SIGNIFICANT ISSUES AND CONCERNS

As required by the state CEQA Guidelines, the scope of this SEIR includes all environmental issues to be resolved and all areas of controversy known to the Lead Agency (the City of Hayward), including those issues and concerns identified as possibly significant by the City in its preliminary review of the project, and by other agencies, organizations, and individuals in

response to the City's Notice of Preparation¹ (dated May 30, 1997). In addition, pursuant to CEQA Guidelines section 15163(b), this SEIR has been focused to contain only the information necessary to make the previous EIR adequate for the project as revised. Areas of controversy and environmental issues to be resolved are listed below.

1. The ***land use and open space implications*** of the project, including: (a) the extent of impact on local open space resources not identified in the 1991 EIR; (b) the relationship of this open space impact to the overall Hayward and Alameda open space inventory; and (c) the compatibility of the project with nearby existing residential, open space, and recreation uses, as well as onsite electrical transmission lines and microwave towers;
2. The ***visual impacts*** of the proposed project (i.e., introduction of an integrated residential/golf course development, and associated tree removal and grading to accommodate building pads and yard areas, driveways, and project roads) as seen from vantage points within adjoining the project site and from other surrounding locations;
3. The ***vegetation and wildlife impacts*** of the project, including: (a) overall impacts on oak woodland, grassland, wetland, and other features; (b) potential impacts on rare and endangered species, particularly the Alameda whipsnake and the Red-legged Frog; and (c) consistency with related U.S. Fish and Wildlife Service and State Department of Fish and Game requirements;
4. The potential ***transportation impacts*** of the project, particularly on Hayward Boulevard, Fairview Avenue, other local streets, and State Route 238;
5. The potential ***fire hazard and protection implications*** of the project, given onsite and surrounding woodland, grassland, and topographic characteristics, and the site's proximity to nearby residential areas;
6. The associated ***fire, police, and EMS impacts*** of the project;
7. The project ***soils and geotechnical implications***, including ground stability impacts (i.e., landslide, soil creep, etc.) and the seismic implications of the proposed project design;
8. The ***drainage and water quality impacts*** of the project, including effects on the existing downstream drainage system, possible needs for onsite detention to offset the project runoff increment, and project impacts on downstream water quality;

¹The Notice of Preparation (NOP) is a CEQA-required brief notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, and involved federal agencies that the Lead Agency plans to prepare an EIR for the project, and solicits guidance regarding SEIR scope and content. A copy of the NOP for this project is included in Appendix A of this SEIR.

9. The other **public facility and service impacts** of the project, including effects on water, sewer, police, schools, parks, libraries, solid waste, and other government services;

D. SIGNIFICANCE OF IMPACTS

This SEIR describes potentially significant adverse project impacts and identifies corresponding mitigation measures. Where it is determined that a particular impact cannot be mitigated to a level of insignificance, the SEIR identifies that impact as "unavoidable." Section VII.C of the SEIR, Unavoidable and Irreversible Adverse Effects, includes a summary list of all significant project impacts identified as "unavoidable." Impacts that are identified in this SEIR as possibly significant, but are not identified as "unavoidable" (i.e., are not listed in section VII.C), have been determined to be capable of mitigation to a point of insignificance by implementation of the associated mitigation measure or measures identified in this SEIR.

E. REPORT ORGANIZATION AND CONTENT

The impact and mitigation information in this SEIR is generally organized under the headings of significant environmental issues (land use, population and housing, transportation, soils and geology, drainage and water quality, vegetation and wildlife, etc.). The report describes the following in Chapter IV for each significant issue or impact category:

1. the existing environmental **setting**;
2. a summary of the **previous impact and mitigation findings** (1991);
3. any **supplemental impact** findings, including impacts which may have changed or may have not been considered in the previous (1991) EIR; and
4. any **supplemental mitigation** recommendations to avoid or reduce impact changes or new impacts not identified in the previous (1991) EIR.

In addition, this report includes a chapter describing **project consistency with currently adopted local and regional plans**, a section summarizing the various **alternatives to the proposed project** discussed in the previous (1991) EIR and analyzing a "mitigated alternative" developed specifically to address the impacts of the currently proposed project, a section summarizing the SEIR information in terms of various **CEQA-required assessment considerations** (including project growth-inducing effects, unavoidable adverse effects, irreversible environmental changes, and "effects found not to be significant"); and finally, a chapter outlining the City's **mitigation monitoring** intentions in keeping with State AB 3180.

F. INTENDED USES OF THE SEIR

This SEIR has been prepared to serve as the CEQA-required environmental documentation for City consideration of this project, including associated precise plans and tentative and final maps, as well as subsequent grading permit approvals, building permit approvals, and other City actions necessary to implement the project. As a result of the information in this SEIR, the City may act to approve or deny these various actions, and to establish any associated additional CEQA requirements or conditions on project design, construction, and operation that it deems warranted in order to mitigate identified project impacts on the environment.

As the Lead Agency, the City also intends for this SEIR to be used by other Responsible Agencies¹ and Trustee Agencies² including, but not limited to, the U.S. Fish and Wildlife Service, the California Regional Water Quality Control Board, and the East Bay Regional Park District, to provide comments to the City during the City's consideration of the proposed project.

G. TECHNICAL APPENDICES

Appendices A through G are included in this SEIR and are listed in the Table of Contents. Additionally, background documents referred to in this SEIR, including the Site Traffic Analysis, Walpert Ridge Development (Barton-Aschman Associates, Inc., June 13, 1997) and cultural resources documentation, are available for review at the City of Hayward Department of Community and Economic Development, 25151 Clawiter Road.

H. PREVIOUSLY-PREPARED EIRS

This SEIR refers to and discusses the following previously-prepared EIRs for the Walpert Ridge area:

- 1979 EIR for Walpert Ridge Specific Area Plan. This planning-level EIR analyzed the environmental implications of a range of development alternatives for Walpert Ridge, including a proposed for a total of 1,800 to 2,300 homes. This latter proposal, which was ultimately reflected in the Walpert Ridge Specific Area Plan adopted by the City of Hayward in 1980, also included requirements for open space dedication, local park dedication, school site dedication, and construction of traffic improvements.

¹Under CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR and SEIR.

²Under CEQA Guidelines, the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California.

- 1988 EIR for The Ridge Development. This project-level EIR analyzed a project proposed for the Hayward 1900 property on Walpert Ridge (the subject project site). The proposed 1988 project consisted of 1,815 low-, medium-, and high-density housing units on the Hayward 1900 property, with a resulting total buildout of 2,300 units on the overall Walpert Ridge. The project also included 13 acres of commercial uses, a school site, 1,172 acres of open space, onsite circulation and utility improvements, and offsite circulation improvements. The City revised and ultimately approved development of up to 1,250 housing units and a 10-acre commercial center on the Hayward 1900 property.
- 1991 EIR for Walpert Ridge Specific Area Plan. As discussed under "B. Supplemental EIR Approach" above, this planning-level EIR evaluated residential development alternatives (ranging from 500 to 1,800 housing units) in a series of four geographic configurations on Walpert Ridge. The Walpert Ridge Specific Area Plan adopted by the City in 1991 allowed for development of 500 to 700 housing units within the 1.5 miles service area radius of Fire Station No. 5.

This project-level SEIR supplements the impact and mitigation findings of the 1991 (planning-level) EIR.

II. SUMMARY

8. Public services,
9. Noise,
10. Air quality,
11. Cultural resources, and
12. Energy

C. SUMMARY OF IMPACTS AND MITIGATIONS

Each significant project impact and associated mitigation measure identified in this SEIR is summarized in the SUMMARY OF IMPACTS AND MITIGATIONS chart that follows. The summary chart has been organized to correspond with the more detailed impact and mitigation discussions in Chapter IV of this SEIR. The chart is arranged in five columns: (1) significant adverse environmental impacts, (2) level of impact significance prior to implementation of recommended mitigation measures, (3) recommended impact mitigation measures, (4) entity responsible for implementing each mitigation measure, and (5) level of impact significance after implementation of the mitigation measure(s).

In those instances where more than one measure may be required to mitigate an impact to a less-than-significant level, a series of mitigation measures is listed. For a complete description of the environmental setting, impacts, and mitigation measures associated with each topic of concern, please refer to Chapter IV of this SEIR.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>LAND USE AND OPEN SPACE</i>				
Impact LU-1: Loss of Open Space. The project would result in the irreversible loss of approximately 574 acres of existing undeveloped ridgeline and hillside open space on the project site that currently has aesthetic, biotic, and agricultural values. The project would contribute to the cumulative loss of open space on Walpert Ridge, in greater Hayward, and in the East Bay hills.	S	Mitigation LU-1: Because new open space cannot feasibly be created to replace the open space that would be developed, no mitigation is available.	NA	SU
Impact LU-2: Relocation of Existing Onsite Regional Trail. The project proposes to relocate a portion of the existing Garin Park Trail that extends from Hayward Boulevard/Fairview Avenue along the western project site boundary to Garin Regional Park. This change could conflict with existing uses of this trail.	S	Mitigation LU-2: In addition to relocation of the Garin Park Trail and development of the trail staging area proposed by the project, require the applicant to (1) obtain written EBRPD approval of the final trail alignment, and (2) dedicate the trail easement to EBRPD.	City, Applicant, EBRPD	LS

S = Significant
LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact LU-3: Potential Conflicts Between Project Urban Uses and Remaining Onsite Open Space Uses. The project proposes residential and golf course development adjacent to areas proposed to be designated as <i>Open Space</i> and that may be used for cattle grazing. This juxtaposition of urban and agricultural (grazing) uses would create the potential for nuisance complaints (e.g., due to odors, dust, or noise from livestock and/or associated farm vehicles).	S	Mitigation LU-3: (1) With approval by the EBRPD or another public agency that may receive the proposed <i>Open Space</i> land dedication, require building setbacks, dense landscaping, and construction of fencing in Neighborhoods A and G and other portions of the project that would adjoin designated <i>Open Space</i> areas that may be used for cattle grazing; (2) discourage vandalism on <i>Open Space</i> lands by requiring the construction of adequate fencing surrounding affected <i>Open Space</i> lands (with EBRPD or other public agency approval) and by the installation of "No Trespassing" signs; (3) formally notify prospective buyers of lots or homes in the project in writing of the potential nuisances that can be anticipated from nearby grazing activity; and (4) require the homeowners association to enact and enforce a leash law to control dogs and minimize related impacts on local livestock grazing (presumably, City leash laws would also remain in effect).	City, Applicant	LS
Impact LU-4: New Water Tank Impacts. The project would require construction of two new water tanks (with a total storage capacity of 2.3 million gallons) immediately northeast of proposed project Neighborhood G, where they	S	Mitigation LU-4: Include design criteria for water tanks in the proposed design guidelines for the project, and incorporate these recommended design features into future water tank development plans. The criteria should	City, Applicant	LS

S = Significant
 LS = Less than significant
 SU = Significant unavoidable impact
 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
could present problems for project residents due to their appearance and flooding potential.		address factors such as location, topographic separation, grading, setbacks from other uses, architectural design, and landscape screening. To reduce the visual impacts of the water tank, trees should be planted, and if possible, earth berming created, to screen the water tank from view. The tank should be painted with a low-gloss paint in a color that blends with the natural environment.		
Impact LU-5: Impacts on Adjacent Existing and Planned Residential Development. The project site would be developed with detached single-family housing at higher densities than (a) existing residential development in the adjacent Prominence subdivision, and (b) planned or potential residential development on the adjacent Bailey and Carden properties. The appearance of the higher density project housing has the potential to alter the generally large-lot suburban residential character of the area.	S	Mitigation LU-5: Implement mitigation measures identified in section IV.B, Visual Factors, of this SEIR to lessen the visual impact of the project on surrounding existing and planned residential areas.	City, Applicant	LS
Impact LU-6: Impacts on Adjacent Regional Parks. The proposed residential and golf course development, and relocation of Garin Park Lane, could diminish the quality of the existing park experience for users of the East	S	Mitigation LU-6: Require the applicant to identify an alternative access to the proposed golf course maintenance center, in consultation with City staff, that is located further away from the Garin Regional Park boundary. Implement	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Bay Regional Park District's Garin Regional Park and Dry Creek Pioneer Regional Park, which adjoin the project site to the southwest.		mitigation measures identified in sections IV.B (Visual Factors), IV.C (Vegetation and Wildlife), IV.F (Drainage and Water Quality), and IV.H.6 (Public Services, Parks and Recreation).		
Impact LU-7: Impacts on Existing City Water Tank. The project would require relocation of water pipe and the access road for an existing City of Hayward water tank, located north of proposed project Neighborhood A. The existing water tank could also present problems for future project residents due to its appearance and flooding potential.	S	Mitigation LU-7: Require City of Hayward approval of relocation plans for the water tank pipe and access road. Include landscape design criteria for the area surrounding the water tank in the proposed design guidelines for the project similar to what has been described herein under <i>Mitigation LU-4</i> , and incorporate these recommended design features into future development plans for this portion of the project site.	City, Applicant	LS
Impact LU-8: Impacts on PT&T and Hayward Police Department Communications Towers. The project would introduce urban (single-family residential, golf course, and water tank) development along the access road to the existing PT&T and City of Hayward Police Department communications towers, and would reserve sites for possible future telecommunications facilities in the tower area. These proposed new uses have the potential to interfere with existing communications operations.	S	Mitigation LU-8: Require written PT&T and City of Hayward Police Department approval of development plans for the proposed project water tanks, Neighborhood G improvements, and any necessary fencing and "No Trespassing" signage in the vicinity of the existing communications towers.	City, Applicant, PT&T	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact LU-9: Cumulative Development on Adjoining Open Space Lands. Extension of utility infrastructure to the project site and development of urban land uses on the project site would increase the viability and likelihood of future development on the adjoining 391-acre Bailey property and the nine-acre Carden property, as designated by the <u>City of Hayward General Plan</u> and <u>Walpert Ridge Specific Plan</u> .	S	Mitigation LU-9: Because new open space cannot feasibly be created to replace adjoining open space that may be developed, no mitigation is available.	NA	SU
Impact LU-10: Population Increase Exceeding Regional Projections. The project would cause local population to exceed official regional population projections.	S	Mitigation LU-10: Implement mitigations identified in sections IV.D (Transportation), IV.H (Public Services), IV.I (Noise), and IV.J (Air Quality). If the general plan and specific plan amendments proposed by the project are approved, the additional project-related population increase above the population increase associated with 1995 <u>Walpert Ridge Specific Plan</u> -allocated development would eventually be reflected in subsequent ABAG projections, which are based in part on local government land use policies such as general plans.	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>VISUAL FACTORS</i>				
Impact VF-1: Views from Garin Regional Park. The potential extent and character of site grading, the potential shape and bulk of the project homes in Cluster E and F, the potential size and height of the golf clubhouse, and the potential for comparatively more uniform appearing finished topography and "manicured" turf of the heavily-graded and irrigated golf course fairways and greens of holes 6 through 9 and 18, could contribute to a significant adverse visual impact on views from Garin Regional Park.	S	Mitigation VF-1: Specify and implement grading, landscape, building and site design measures in subsequent project design phases, subject to city design review and approval. (See SEIR text for details.)	City, Applicant	LS
Impact VF-2: Project Cumulative Impact on Middle- and Long-Range Views of Walpert Ridge. The aggregate effect of the project housing clusters, and associated landscaping, roadways and fencing, would be visible as an extension of existing recent residential development on the Hayward Boulevard/Fairway Avenue loop in middle-range and long-range views of Walpert Ridge from the East Bay Plain.	S	Mitigation VF-2: Implement project grading, landscaping, site and building design revisions, subject to city design review and approval. (See SEIR text for details.)	City, Applicant	LS
Impact VF-3: Grading Plan Inconsistencies with City Policies. Although project grading activities are confined to the north-central	S	Mitigation VF-3: The proposed preliminary development plan package includes specific revisions to current Walpert Ridge Specific Plan	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
portion of the site (the majority of the site--65 percent--is retained as open space), the project grading concept for the north-central portion of the site includes basic aspects and characteristics that may be inconsistent with the adopted policies, standards, and guidelines set forth in the <u>Hayward General Policies Plan</u> and <u>Walpert Ridge Specific Plan</u> .		policies to accommodate the project, including replacement of the current Conceptual Grading Plan. To eliminate the remaining apparent plan inconsistencies identified above, further revise (amend) associated specific plan policies to fully reflect the final project grading plan, or revise the grading concept to incorporate the revisions. (See SEIR text for details.) Implementation of these listed measures, subject to city design review and approval, would be expected to achieve project consistency with adopted city policies, standards, guidelines and requirements pertaining to the visual impacts of grading and thus would reduce this visual impact.		
Impact VF-4: Grading and Development Atop the Main Ridge Crest. Although project grading activities are confined to the north-central portion of the site (the majority of the site--65 percent--is retained as open space), the substantial extent of proposed grading on the north-central portion site's main ridge crest, and the proposed placement of project lots in neighborhood clusters A, B, and C atop the graded ridge crest, could have a substantial, demonstrable negative visual effect.	S	Mitigation VF-4: Implement grading plan, site plan, and development standard revisions, subject to city design review and approval. (See SEIR text for details.)	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact VF-5: Loss of Sensitive Visual Features. The proposed development plan would concentrate development in a 574-acre contiguous area on the north-central portion of the 1,655-acre site, preserving sensitive visual features on the remaining 1,061 acres (65 percent) at the site. Within the development area, the plan would also avoid Bay Trees Knoll and would preserve Three Oaks Knoll. Nevertheless, the project site plan and grading plan would still result in the loss of a number of Specific-Plan-identified important, sensitive onsite visual features within the 574-acre development area, including Rocky Knoll, most other existing rock outcroppings, and some small areas of oak woodland.	S	Mitigation VF-5: Implement grading plan and site plan revisions, subject to city design review and approval. (See SEIR text for details.)	City, Applicant	LS

VEGETATION AND WILDLIFE

Impact VW-1: Project Impacts on Coast Live Oak, Valley Oak, California Bay, and Big Leaf Maple Trees. Construction of the project would require removal of coast live oaks, valley oaks, California bays, and big leaf maple trees, many of which are greater than six inches in diameter at breast height (4.5 feet above grade). Removal of these trees would reduce the	S	Mitigation VW-1: Redesign the project to avoid coast live oaks, valley oaks, California bays, and big leaf maple trees, as feasible; and require preparation of a <i>Tree Preservation and Management Plan</i> that includes provisions for tree replacement, irrigation, and monitoring (see SEIR text).	City, Applicant	LS
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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
number of large trees on the site, would reduce avian and mammalian nesting opportunities, and would reduce wildlife cover.				
Impact VW-2: Project Impacts on Special-Status Plants. Project development has the potential to impact special-status plants that may be found in approximately six acres of coast live oak forest, 27 acres of coastal sage scrub, and 381.0 acres of non-native annual grassland that would be affected by the project.	S	Mitigation VW-2: Require springtime surveys for special-status plants, and either avoid or transplant/collect seed of any identified special-status plants to protected open space habitat.	City, Applicant	LS
Impact VW-3: California Red-Legged Frog. The project would directly affect red-legged frog habitat through project construction, and indirectly through changes in existing onsite hydrology, increase in non-native predators, and changes in water and soil chemistry due to introduction of herbicides, pesticides, and fertilizers.	S	Mitigation VW-3: Require (1) avoidance of all ponds and drainages (including areas immediately upslope) on the project site, or (2) replacement of affected habitat in accordance with USFWS requirements. In addition, require measures to reduce construction-related impacts and downstream impacts on this species. Finally, all resource agency approvals must be granted prior to earth moving activity.	City, Applicant	LS
Impact VW-4: Project Impacts on Alameda Whipsnake. The project would destroy 120 acres of "core" habitat and 24 acres of foraging habitat for the Alameda whipsnake.	S	Mitigation VW-4: Prior to project construction, require the applicant to (1) obtain State and Federal agency approvals authorizing "incidental take" of Alameda Whipsnake habitat, and	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		(2) prepare and implement an <i>Alameda Whipsnake Mitigation Plan</i> .		
Impact VW-5: Project Impacts on San Francisco Dusky-Footed Woodrat. The project has the potential to damage or destroy six acres of coast live oak forest that constitutes suitable San Francisco dusky-footed woodrat habitat.	S	Mitigation VW-5: Require surveys to be conducted in all oak habitats within the proposed development area prior to tentative subdivision map approval. If woodrats or their nests are found, either avoid their habitat or trap and relocate the woodrats to suitable habitat in the onsite dedicated open space area. Mitigation for any impacts would need to be arranged with CDFG. Preconstruction surveys would also be necessary if any woodrats are identified during earlier surveys.	City, Applicant, CDFG	LS
Impact VW-6: Project Impacts on Greater Western Mastiff, Pacific Western Big Eared, and Myotis Bats. The project would eliminate approximately six acres of coast live oak forest, as well as abandoned buildings that may provide roosting habitat for these bats.	S	Mitigation VW-6: Require surveys to be conducted in all oak habitats and buildings within the proposed development area prior to tentative subdivision map approval. If any special-status bat species are identified, their habitat shall be avoided. If avoidance is not feasible, bats shall be evicted from their roost sites. In addition, bat houses shall be constructed in open space areas outside the proposed development area. Preconstruction surveys shall also be required if special-status bats are identified during earlier surveys.	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact VW-7: Project Impacts on Golden Eagle. The project would eliminate approximately six acres of coast live oak forest, which provides suitable nesting habitat for golden eagles. Project construction could also disturb an existing golden eagle nest in Garin Regional Park.	S	Mitigation VW-7: Require (1) spring nesting surveys for golden eagle prior to project construction and (2) construction-period mitigations to prevent disturbance of the Garin Regional Park nest and any identified onsite nests.	City, Applicant	LS
Impact VW-8: Project Impacts on Cooper's Hawk. The project would eliminate approximately six acres of coast live oak forest that may provide nesting habitat for the Cooper's hawk.	S	Mitigation VW-8: Prior to project construction, require a spring survey for Cooper's hawk nests. If nest(s) are identified, require an adequate buffer zone around the nest(s) as determined by a raptor biologist and CDFG, and other mitigations during construction.	City, Applicant	LS
Impact VW-9: Project Impacts on Sharp-Shinned Hawk. The project would eliminate approximately six acres of coast live oak forest that may provide nesting habitat for the sharp-shinned hawk. Project construction could also disturb an existing sharp-shinned hawk nest in Garin Regional Park, approximately 1,400 feet southwest of the project's grading limit.	S	Mitigation VW-9: Require (1) spring surveys for sharp-shinned hawk nests prior to project construction, and (2) construction period mitigations to prevent disturbance of the Garin Regional Park nest and any identified onsite nests.	City, Applicant	LS
Impact VW-10: Project Impacts on Northern Harrier. The project would eliminate approximately 381 acres of non-native grassland	S	Mitigation VW-10: Prior to project construction, require a spring survey for northern harrier nests. If nest(s) are identified, require a one-	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
that may provide nesting habitat for the northern harrier.		quarter-mile buffer zone (or as determined by a qualified biologist in consultation with the Department of Fish and Game) around the nest(s) and other mitigations during construction.		
Impact VW-11: Project Impacts on White-Tailed Kite. The project would eliminate approximately 381 acres of non-native grassland, as well as portions of adjacent coast live oak forest and coastal sage scrub, that may provide nesting habitat for the white trailed kite.	S	Mitigation VW-11: Prior to project construction, require a spring survey for white-tailed kite nests. If nest(s) are identified, require a one-quarter-mile buffer zone (or as determined by a qualified biologist in consultation with the Department of Fish and Game) around the nest(s) and other mitigations during construction.	City, Applicant	LS
Impact VW-12: Project Impacts on Burrowing Owl. The project would eliminate approximately 381 acres of non-native annual grassland that may provide habitat for burrowing owls.	S	Mitigation VW-12: Require surveys for burrowing owls, installation of one-way eviction doors on burrows, if necessary, for any identified owls, and construction-period mitigations in accordance with CDFG and Burrowing Owl Consortium protocols.	City, Applicant	LS
Impact VW-13: Project Impacts on Tricolored Blackbird. The project would eliminate shrubby willows and nine to 11 acres of wetland habitat that may provide nesting habitat for the tricolored blackbird.	S	Mitigation VW-13: Prior to project construction, require a spring survey for tricolored blackbird nests. If nest(s) are identified, require a 500-foot buffer zone around the nest(s) and other mitigations during construction.	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact VW-14: Project Impacts on Wildlife Corridors. The project has the potential to reduce the ability of wildlife to move from and through the project site to surrounding open spaces.	S	Mitigation VW-14: As proposed by the project, dedicate remaining onsite open space to the EBRPD or other public agency.	City, Applicant	LS
Impact VW-15: Project Impacts on Waters of the U.S. and/or Stream Channels. The project would eliminate nine to 11 acres of "waters of the U.S.," including stream channels.	S	Mitigation VW-15: Replace wetlands and stream channels in accordance with CDFG and U.S. Army Corps of Engineers requirements.	City, Applicant	LS
Impact VW-16: Cumulative Impacts on Biotic Resources. The project would contribute to the cumulative loss of (1) coast live oak forest, coastal sage scrub, wetland, and non-native annual grassland habitats; (2) special-status plant and animal species, including the California red-legged frog and the Alameda whipsnake; and (3) common plant and animal species.	S	Mitigation VW-16: As proposed by the project, require the applicant to dedicate and/or preserve approximately 1,000 acres of onsite open space. In addition, require enhancement of natural habitats on the project site that are outside of the development footprint. Combine these measures with implementation of <i>Mitigations VW-1 through VW-15</i> above to reduce the project's contribution to the cumulative biotic resource impact.	City, Applicant	LS
TRANSPORTATION				
Impact T-1: Project Impacts on Farm Hill Drive/Hayward Boulevard Intersection (Scenario 2). The projected volumes at this intersection resulting from the project would	S	Mitigation T-1: Require development on Walpert Ridge to fund the full cost of installing a signal that provides permitted phasing (i.e., green light without turn arrows) on all four	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
meet the Caltrans signal warrant for rural locations. This warrant would not be met by projected volumes without the project, and traffic from Walpert Ridge development would account for the majority of traffic added to the intersection.		approaches. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement.		
Impact T-2: Cumulative Impacts on Civic Avenue/Hayward Boulevard Intersection (Scenario 2). The project would cause AM and PM peak hour intersection delay to increase by more than four seconds at the intersection of Civic Avenue and Hayward Boulevard where LOS F operations are expected in the AM and PM peak hours without the project.	S	Mitigation T-2: Since signal warrants have already been reached and the level of service rating is already F in the AM peak hour under existing conditions, require the first development on Walpert Ridge to install a signal that provides permitted phasing (i.e., green light without turn arrows) on all four approaches. Reimbursement of costs beyond the 56-percent Walpert Ridge share may come from existing deposits or a benefit district. If the signal is not constructed by the Blue Rock Country Club project, require as a condition of approval that the project sponsor fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the <u>project's</u> contribution to this cumulative impact.	City, Applicant	LS
Impact T-3: Cumulative Impacts on Second Street/E Street Intersection (Scenario 2). The project would cause AM peak hour intersection delay to increase by more than four seconds at	S	Mitigation T-3: Require development on Walpert Ridge to fund five percent of the cost of (1) conversion of the northbound shared left-through lane to exclusive left and through lanes,	City, Applicant	SU (if remaining funding for improvements is not secured)

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
the intersection of Second Street and E Street where LOS F operations are expected in the AM peak hour without the project.		and (2) the change of eastbound and westbound approach phasing from permitted (i.e., green light without turn arrows) to protected (i.e., green light with turn arrows). As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the <u>project's</u> contribution to this cumulative impact. If the remaining funding for this improvement cannot be secured, the cumulative effect on this intersection would remain a significant, unavoidable cumulative impact.		
Impact T-4: Cumulative Impacts on Mission Boulevard/Carlos Bee Boulevard Intersection (Scenario 2). The project would cause AM and PM peak hour intersection delay to increase by four or more seconds at the intersection of Mission Boulevard and Carlos Bee Boulevard where LOS F operations are expected in the AM and PM peak hours without the project.	S	Mitigation T-4: Require development on Walpert Ridge to fund 20 percent of the cost of the addition of a third northbound through lane and a second southbound left-turn lane. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the <u>project's</u> contribution to this cumulative impact. If the remaining funding for this improvement cannot be secured, the cumulative effect on this intersection would	City, Applicant	SU (if remaining funding for improvements is not secured)

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		remain a significant, unavoidable cumulative impact.		
Impact T-5: Cumulative Impacts on Mission Boulevard/Harder Road Intersection (Scenario 2). The project would cause AM and PM peak hour intersection delay to increase by more than four seconds at the intersection of Mission Boulevard and Harder Road where LOS F operations are expected during the AM and PM peak hours without the project.	S	Mitigation T-5: Require development on Walpert Ridge to fund six percent of the cost of addition of a second northbound left-turn lane, addition of a third southbound through lane, addition of a third eastbound through lane, addition of a second westbound left-turn lane, and conversion of the exclusive westbound right-turn lane to a shared through-right-turn lane. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the <u>project's</u> contribution to this cumulative impact. If the remaining funding for this improvement cannot be secured, the cumulative effect on this intersection would remain a significant, unavoidable cumulative impact.	City, Applicant	SU (if remaining funding for improvements is not secured)
Impact T-6: Project Impact on Fairview Avenue. The project would add up to 319 vehicle trips in both directions on Fairview Avenue, accounting for approximately 50 percent of the total volume.	S	Mitigation T-6: Require development on Walpert Ridge to fund 50 percent of the cost of traffic calming and safety measures for the segment of Fairview Avenue between Hayward Boulevard and Five Canyons Parkway. As a condition of project approval, require the Blue	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to these improvements.		
Impact T-7: Project Impacts on Project Entry Road/Fairview Avenue/Hayward Boulevard Intersection. This intersection would be created by the Blue Rock Country Club project, and the projected volumes at this intersection resulting from the project would meet the Caltrans signal warrant for rural locations.	S	Mitigation T-7: As a condition of Blue Rock Country Club project approval, require the intersection of Fairview Avenue and Hayward Boulevard to be signalized.	City, Applicant	LS
Impact T-8: Garin Park Lane Access to School and Park. The project as proposed would not provide public street access to the proposed onsite public elementary school and neighborhood public park, since Garin Park Lane is proposed to be a private road. In addition, this roadway would not meet City of Hayward street width standards.	S	Mitigation T-8: As a condition of project approval, require that Garin Park Lane from the project entry road to the end of the school/park site be dedicated to the City of Hayward as a public right-of-way. Require that a minimum 48-foot-wide right-of-way be provided for this roadway, in accordance with City of Hayward standards.	City, Applicant	LS
Impact T-9: Sidewalks on Neighborhood Roads. Proposed neighborhood roads do not contain sidewalks.	S	Mitigation T-9: Require revision of the project plans to provide sidewalks on one side of the street on proposed neighborhood roads, or other alternative pedestrian access in these neighborhoods.	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact T-10: Garin Park Lane Emergency Vehicle Access. The project plans as proposed illustrate a 14-foot travel lane with three-foot-wide shoulders along the emergency access portion of Garin Park Lane, rather than a 20-foot-wide paved roadway as discussed in the applicant-prepared <u>Fire/Emergency Medical Services Mitigation Plan</u> approved by the City of Hayward Fire Department.	S	Mitigation T-10: Require (a) revision of the project plans to provide a 20-foot roadway width for the Garin Park Lane emergency vehicle access, or (b) applicant demonstration that, due to steep slopes in this area, only 14 feet of roadway width can be provided, in accordance with <u>Fire/Emergency Medical Services Mitigation Plan</u> provisions.	City, Applicant	LS

SOILS AND GEOLOGY

Impact E-1: Slope Failure Impacts. Large areas of the project site contain geologic conditions conducive to the development of landslides, particularly debris flows in colluvial deposits. The potential for these slope failures cannot be completely controlled through slope design or repair. Future landsliding could damage structures or other improvements onsite.	S	Mitigation E-1: Require site-specific geotechnical reports, grading plan design measures, supervised grading and slope preparation, and a <i>Slope Management Program</i> .	City, Applicant	LS
Impact E-2: Damage to Structures by Soil Creep. Soil creep on and near slopes could cause damage to structures or other improvements (e.g., fences, decks).	S	Mitigation E-2: To the extent possible, avoid placing structures, utilities, and fences on or near the tops of slopes or in the shallow subsurface of slopes. Those improvements that are placed on slopes, or within ten feet of the	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		tops of slopes, shall be approved for construction by a registered geotechnical engineer or certified engineering geologist. Potential measures for stabilizing structures affected by the impacts of creep could include extending foundations to below the creep zone, removal and replacement of creeping soils with non-expansive soils, or stabilization of creeping soil with lime-treatment or installation of geofabric.		
Impact E-3: Potential Long-term Deformation of Deep Fills. The proposed construction of deep fills onsite could cause adverse soil conditions which, in turn, could cause deformation of the fills. This deformation could affect the performance of foundations and other site improvements, including roadways and utility lines.	S	Mitigation E-3: Address the potential for delayed consolidation within deep fills and associated land surface subsidence in the final geotechnical report for the proposed project grading plan in order to reduce associated impacts.	City, Applicant	LS
Impact E-4: Strong Expected Seismic Shaking. Onsite ground shaking during the maximum expected earthquake on the Hayward fault could cause structural and nonstructural damage to the proposed structures.	S	Mitigation E-4: Require (a) conformance with Uniform Building Code and California Division of Mines and Geology requirements, (b) preparation of an earthquake hazards information document for homeowners, and (c) preparation of an earthquake preparedness and emergency response plan for each community facility.	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>DRAINAGE AND WATER QUALITY</i>				
Impact F-1: Storm Drainage System Capacity. Increased runoff resulting from creation of new impervious surfaces could leave the site, potentially exceeding capacity of conveyance structures downstream. Interception of the runoff could degrade downstream riparian habitat.	S	Mitigation F-1: As a condition of approval, require that the final grading and drainage plans for the project demonstrate (a) that the proposed drainage plan would not increase peak flows downstream of the project site to a level that would adversely affect downstream riparian habitat or exceed the capacity of existing facilities; and (b) that all onsite drainage components are designed in compliance with City of Hayward and Alameda County Flood Control and Water Conservation District (ACFCWCD) standards. The proposed detention basins shall be maintained by the homeowner's association with annual inspections conducted by the City of Hayward, unless the ACFCWCD agrees to assume maintenance responsibility. As a condition of approval of the final drainage plan, require that a detention basin operation and maintenance plan be developed by the applicant. The homeowners' association shall submit annual reports to the City Department of Public Works. The City shall review the annual reports and schedule inspections of each detention basin each year prior to the rainy season to ensure	City, Applicant, Homeowners' Association	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		that provisions of the operation and maintenance plan are being implemented.		
Impact F-2: Stormwater Runoff Water Quality Impacts. Construction activities and post-construction site uses could result in degradation of water quality in nearby surface water bodies by reducing the quality of storm water runoff.	S	Mitigation F-2: Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project site. The SWPPP shall include Best Management Practices (BMPs) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP shall reduce or eliminate impacts to surface water quality from all phases of the project.	City, Applicant	LS
Impact F-3: Golf Course Runoff Water Quality Impacts. The application of golf course fertilizers and pesticides for turf grass maintenance could result in increased long-term water quality degradation in nearby creeks. Also, the leaching of nitrates and pesticides may cause chemicals to enter the groundwater table.	S	Mitigation F-3: Mitigate potential water quality impacts associated with the proposed project by preparing and implementing two plans designed to protect water quality: a <i>Golf Course Design and Management Plan</i> , and a <i>Water Quality Monitoring Plan</i> .	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>PUBLIC HEALTH AND SAFETY</i>				
<u>Wildland Fire Hazards</u>				
Impact PHS-1: Project-Related Wildland Fire Hazards. Project-related urban development and human activity would increase the potential for wildland fire and hazards associated with this type of fire. Project residents, golf course patrons, and other project occupants could be exposed to a wildland fire that could originate from onsite or surrounding open space.	S	Mitigation PHS-1: Require the project to comply with (a) the "Urban/Wildland Interface Guidelines" contained in City of Hayward <u>Hillside Design and Urban/Wildland Interface Guidelines</u> ; (b) City of Hayward <u>Walpert Ridge Specific Plan</u> policies regarding fire management; (c) the applicant-proposed <u>Fire/Emergency Medical Services Mitigation Plan</u> , as approved by the City of Hayward Fire Department; and (d) applicable Building Code and Fire Code regulations. Require the applicant to retain a fuel management consultant to work with the City of Hayward to achieve project compliance with applicable regulations.	City, Applicant	LS
Impact PHS-2: Cumulative Wildland Fire Hazards. The project would contribute to a cumulative increase in urban development and human activity in the Walpert Ridge area, increasing the potential for wildland fire and hazards associated with this type of fire.	S	Mitigation PHS -2: Require future applicants for development in the Walpert Ridge area to prepare Fire/Emergency Medical Service Mitigation Plans subject to City of Hayward Fire Department approval, and to comply with (a) City of Hayward <u>Hillside Design and Urban/Wildland Interface Guidelines</u> , (b) City of Hayward <u>Walpert Ridge Specific Plan</u> policies	City, Future Applicants	LS

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SU = Significant unavoidable impact
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
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regarding fire management, and (c) applicable Building Code and Fire Code regulations.

Electric and Magnetic Fields

Impact PHS-3: Exposure of Housing Units to EMFs. Residential structures on approximately nine lots in proposed project Neighborhood A and one lot in Neighborhood G could be located within 150 feet of the existing 75-foot-wide 230 kV PG&E electrical transmission line easement that extends through the project site, possibly exposing residents to electric and magnetic fields (EMFs).	S	Mitigation PHS-3: Require residential structures to be set back a minimum of 150 feet from the electrical transmission line easement on the project site.	City, Applicant	LS
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PUBLIC SERVICES

Fire Protection/Emergency Medical Services

Impact PS-1: Project-Related Demand for Fire Protection and Emergency Medical Services. The project would increase the demand for fire protection and emergency medical services provided by the City of Hayward Fire Department.	S	Mitigation PS-1: In addition to the measures identified in section IV.G (Public Health and Safety) of this SEIR, require the project applicant to fund (1) installation of a new Type III engine company at Station No. 5, to be staffed by the existing crew at this station, and (2) modifications to Station No. 5 to house the new Type III engine company. In addition,	City, Applicant	LS
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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		require the project to comply with the "additional measures for all development" identified in the 1991 EIR (see Table 27).		
Impact PS-2: Cumulative Demand for Fire Protection and Emergency Medical Services. The project would contribute to cumulative increases in demand for fire and emergency medical services in the Walpert Ridge area.	S	Mitigation PS-2: During City review of proposed development plans in this area, verify that proposed urban development is located within 1.5 to 1.6 miles of Station No. 5, and require City of Hayward Fire Department review of the proposed plans to ensure that adequate emergency vehicle access is provided.	City	LS
<u>Police Services</u>				
Impact PS-3: Project-Related Demand for Police Services. The project would increase the demand for services provided by the City of Hayward Police Department, requiring the hiring of a minimum of one new police officer.	S	Mitigation PS-3: Monitor the rate of additional police calls per year associated with the project area and the adequacy of response times. As warranted by the monitoring data, provide additional officers and facilities (funded through the City's general fund), and establish a new police beat if necessary. Require Police Department review and approval of final project plans.	City	LS
Impact PS-4: Cumulative Demand for Police Services. The project would contribute to cumulative increases in demand for police services in the Walpert Ridge area.	S	Mitigation PS-4: Require future applicants for development in the Walpert Ridge area to comply with <i>Mitigation PS-3</i> above.	City	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<u>Schools</u>				
Impact PS-5: Project-Related Impacts on HUSD Capacity. The proposed onsite elementary school would provide adequate capacity to accommodate the estimated 143 elementary school students generated by the project. The existing Bret Harte Middle School and Hayward High School may not have sufficient capacity to accommodate the estimated 39 middle school students and 59 high school students from the project, however.	S	Mitigation PS-5: Require the project applicant to comply with standard HUSD school impact fee requirements. This measure would reduce the project's impact on HUSD schools, but not to a less-than-significant level. Alternatively, the applicant may voluntarily enter into a development agreement with the City of Hayward that, as determined by the Hayward City Council in its approval of the City/applicant development agreement, provides for (1) land dedication and construction of a 350-student elementary school on the project site, as proposed by the project; (2) payment of impact fees at a rate of \$2.84 per square foot of residential development; or (3) other school mitigation acceptable to the HUSD and included in the City/applicant development agreement.	City, Applicant, HUSD	LS
Impact PS-6: Cumulative Impacts on HUSD Capacity. Increases in enrollment at HUSD schools due to cumulative residential development in the Walpert Ridge area and citywide may create substantial capacity problems at all grade levels.	S	Mitigation PS-6: The voluntary school mitigation provisions of the applicant/City of Hayward development agreement discussed under <i>Mitigation PS-5</i> above would reduce the project's contribution to this cumulative impact to a less-than-significant level. In addition, require future applicants to comply with HUSD school impact fee requirements to finance school	City, Applicant, Future Applicants	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		improvements. Alternatively, applicants may voluntarily enter into agreements with the HUSD that provide for school construction and/or payment of impact fees negotiated with the HUSD.		
<u>Water Services</u>				
Impact PS-7: Project Water Transmission and Distribution Line Needs. The development of the project would require additional water transmission and distribution facilities to serve the project.	S	Mitigation PS-7: Implement improvements identified in the <u>Analysis of Water Facilities, for the Walpert Ridge Development Including Proposed Blue Rock Country Club Project</u> (Montgomery Watson, June 30, 1997) or any improvements deemed necessary by the City to maintain the City's required level of service. Determination of actual improvements necessitated by the final project design to be based upon a comprehensive study/plan developed by a qualified consultant and approved by the City.	City, Applicant	LS
Impact PS-8: Project Golf Course and Park Irrigation Needs. Although the City of Hayward's water supply would be adequate, the use of potable water supplies for irrigation of managed golf course and park turf areas may	S	Mitigation PS-8: Require the applicant to redesign the proposed golf course to reduce irrigation water demand, and/or design the golf course irrigation system to reclaim water for reuse. Investigate and develop, as feasible,	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
not be acceptable, especially during extended drought periods.		groundwater resources as a supplemental source of water for irrigation of managed golf course and park turf areas.		
<u>Sewer Services</u>				
Impact PS-9: Project Sewer Extension and Upgrading Needs. The development of the project would require extension and upgrading of sanitary sewers to serve the project. Some of the existing City sewers near the project are inadequately sized to accommodate the increased flow from the project.	S	Mitigation PS-9: As a condition of project approval, require the applicant to install (a) a 1,500-foot section of 10-inch sewer main on Hayward Boulevard, starting at Plumas Court; and (b) an 1,100-foot section of 10-inch sewer main to bypass the Vista Bahia Way sewers. In addition, require the applicant to verify the adequacy of the existing 10-inch main on Barn Rock Drive to handle the wastewater flows from the project.	City, Applicant	LS
<u>Parks and Recreation</u>				
Impact PS-10: Project-Related Increase in Local Park Demand. The project's estimated 1,911 residents would increase the demand for local park and recreational facilities. The project would provide one approximately five-acre public park (with specific improvement needs and responsibilities to be determined by the applicant and HARD), along with nine private village mini-parks, a swim and tennis club, a	S	Mitigation PS-10: Prior to project approval, require the applicant and HARD to develop an adequate configuration for the proposed onsite park that is acceptable to the City of Hayward, and to identify specific improvement needs and responsibilities.	City, Applicant, HARD	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
privately managed 18-hole golf course, alignments for the Bay Area Ridge Trail and Garin Park Trail, a trail staging area, and dedication and/or preservation of approximately 1,000 acres of open space. The five-acre public park would not meet HARD park acreage standards or City of Hayward parkland dedication requirements, although the applicant may apply to the City Council for a 50-percent reduction in the parkland dedication requirement.				
Impact PS-11: Project-Related Increase in Regional Park Use. The project's estimated 1,911 residents would increase demands on regional park and recreational facilities, including the adjoining Garin and Dry Creek Pioneer Regional Parks and onsite and surrounding regional trails. The possibility of trespassing in park areas not intended for public use and/or during hours when parks are closed would also increase.	S	Mitigation PS-11: In addition to development of the trail staging area, provision of the Garin Park Trail and Bay Area Ridge Trail alignments and dedication and/or preservation of onsite open space as proposed by the project, require the applicant to (1) provide barbed wire fencing (with gates) around dedicated onsite open space areas, and (2) replace any fencing on EBRPD property that is removed during project construction.	City, Applicant	LS
Impact PS-12: Cumulative Increases in Local and Regional Park Demands. Additional residential development in the Walpert Ridge area and citywide would increase the demand	S	Mitigation PS-12: Implement <i>Mitigations PS-10</i> and <i>PS-11</i> . In addition, the City should work with other future residential developers in the city to secure applicable parkland dedications	City, Applicant, Future Applicants	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
for local and regional park and recreational facilities.		and/or in-lieu fees, and to develop similar phasing and monitoring plans for park improvements to ensure that adequate parks are constructed to serve the demands of new development.		
<u>Other Government Services</u>				
Impact PS-13: Access to PG&E Transmission Line Easement. The project has the potential to interfere with PG&E equipment access to the electrical transmission line easement located in the central portion of the project site.	S	Mitigation PS-13: Require the project to provide adequate access for PG&E to the PG&E transmission line easement. Forward project plans to PG&E for review, comment, and approval of PG&E easement access provisions.	City, Applicant, PG&E	LS
NOISE				
Impact N-1: Construction Equipment Noise Impacts on Offsite Uses. During project construction, temporary noise increases would result from the operation of heavy equipment. This noise could disturb residents of housing located immediately adjacent to the project site in the Prominence subdivision.	S	Mitigation N-1: Require the applicant to incorporate conditions in project construction agreements that stipulate conventional construction-period noise and dust abatement measures.	City, Applicant	LS

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SU = Significant unavoidable impact
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact N-2: Construction Equipment Noise Impacts on Future Onsite Uses. Ongoing project construction noise could disturb project residents.	S	Mitigation N-2: Implement <i>Mitigation N-1</i> .	City, Applicant	LS
Impact N-3: Construction Truck Noise Impacts. During project construction, residences located along Hayward Boulevard would be subject to noise increases from increased truck traffic that would be associated with project-related equipment and materials deliveries.	S	Mitigation N-3: Require project-related delivery and haul truck operations on offsite access roads to be limited to the daytime, weekday (non-holiday) hours (8:00 AM to 5:00 PM). Require the project construction agreement to limit the hourly truck volume for deliveries to less than 10 per hour.	City, Applicant	LS
Impact N-4: Project and Cumulative Traffic Noise. Traffic from the proposed project and other development on Walpert Ridge would generate noise increases of more than 5 dBA on Hayward Boulevard and Fairview Avenue. These noise levels could disturb residents living along these roads.	S	Mitigation N-4: No feasible mitigation is available for reducing project and cumulative traffic on Fairview Avenue and Hayward Boulevard, and noise attenuation (through installation of sound walls or mechanical ventilation) at affected existing residences would not be within the authority of the City or applicant.	NA	SU
Impact N-5: Project Compatibility with the Future Onsite Noise Environment. Housing units in Neighborhoods B, C, D, and E could be constructed within 50 feet of the project's main entrance road, and the proposed onsite school buildings would be located as close as 100 feet	S	Mitigation N-5: Require a detailed analysis of noise reduction requirements for project residential neighborhoods located closer than 100 feet from the project's main access road. If found to be necessary, this analysis should provide required wall heights and design to	City, Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
to the main entrance road, creating the potential for traffic noise problems in these areas.		achieve acceptable noise levels in usable outdoor spaces (60 dBA Ldn) and any supplemental noise insulation features to achieve acceptable indoor noise levels on second stories of homes (45 dBA L _{dn}). In addition, require a detailed analysis of noise reduction requirements for the onsite school, and require noise attenuation measures to reduce interior noise levels to 45 dBA L _{eq} , between the hours of 7:00 AM and 5:00 PM.		

AIR QUALITY

Impact AQ-1: Construction Period PM-10 Emissions. Construction activities associated with the proposed project would generate short-term emissions of criteria pollutants that include suspended or inhalable particulate matter (including the respirable fraction known as PM₁₀, particles 10 microns or less in diameter) and equipment exhaust emissions. PM₁₀ emissions would exceed the BAAQMD significance threshold.

S

Mitigation AQ-1: Require project construction contractors to implement the BAAQMD dust control measures during all phases of project construction. The extent to which each group of measures shall be implemented would depend on future project phasing and the extent of surface disturbance at any one time. Implementation of these measures would reduce project emissions, but could not reduce project emissions to a less-than-significant level during the first two years of construction.

City, Applicant

SU

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Impact AQ-2: Short-Term Construction Equipment Exhaust Impacts. Equipment exhaust emissions during construction would result from vehicular traffic generated by the construction activities, including automobiles transporting workers to and from the project site, and from construction equipment and machinery. Nitrogen oxide (NO _x) emissions would exceed the BAAQMD significance threshold.	S	Mitigation AQ-2: Require project construction contractors to implement exhaust reduction measures during all phases of project construction. Implementation of these measures would reduce project emissions, but could not reduce project emissions to a less-than-significant level.	City, Applicant	SU
Impact AQ-3: Project and Cumulative Impacts on Long-Term Regional Air Quality. Emissions from project and cumulative development would cause regional air pollutant levels to exceed BAAQMD significance thresholds for CO, ROG, NO _x , and PM ₁₀ .	S	Mitigation AQ-3: Implement BAAQMD-recommended measures for reducing motor vehicle emissions.	City, Applicant	SU
CULTURAL RESOURCES				
Impact CR-1: Honcharenko Homesite. Although the project would not result in development of the Honcharenko Homesite, the project could adversely affect this historic site because access to the area would increase both during and after the construction phase of the project. During the construction phase of the	S	Mitigation CR-1. (a) Permit the Honcharenko Home and Worship site to remain under the ownership and management of the East Bay Regional Park District; (b) avoid disturbance of the Honcharenko Homesite; and (c) in consultation and coordination with, and subject to approval by the EBRPD, record and conduct	City, Applicant, EBRPD	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
project, staging of construction equipment and vehicles could disturb the site. After construction, the increase in public access afforded by the project to the homesite would increase the potential for vandalism.		further onsite research necessary for recordation of the homesite, including mapping and photography following, at a minimum, the standard procedures of the California Department of Parks and Recreation, Office of Historic Preservation.		
<i>ENERGY</i>				
Impact E-1: Energy Use from Project Construction. Construction-period energy consumption would total approximately 14 million therms.	S	Mitigation E-1: No addition mitigation is available beyond that identified in the 1991 EIR.	City, Applicant	SU
Impact E-2: Energy Use from Project Operations. At buildout, the residential, school, and recreational uses proposed by the project would use an estimated 958,000 therms of energy each year.	S	Mitigation E-2: In addition to the mitigation measures identified in the 1991 EIR, require the project to comply with Title 24 Energy Efficiency Standards and City of Hayward <u>Design Guidelines</u> regarding solar access.	City, Applicant	SU
Impact E-3: Transportation-Related Energy Consumption. Unless the project provides for modes of transportation that offer viable alternatives to the automobile, the project would be expected to result in comparatively wasteful uses of transportation fuel.	S	Mitigation E-3: Require the applicant to (1) work with the City to obtain AC Transit agreement to extend bus service to the project site, and (2) provide for at least one bus stop near the project entry. Provide space at the golf clubhouse or other location for carpool or vanpool parking, as directed by the City.	City, Applicant, AC Transit	SU (if AC Transit is not able to serve site)

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LS = Less than significant
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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		Require golf carts to be electrically operated instead of gasoline powered, if feasible based on site topography. Implement <i>Mitigation AQ-3</i> identified in the section IV.J, Air Quality, to reduce automobile trips.		

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D. SUMMARY OF ALTERNATIVES

1. Identified Alternatives

Chapter VI of this SEIR (ALTERNATIVES TO THE PROPOSED PROJECT) contains an evaluation of four alternatives to the project as currently proposed:

- *Alternative A: No Project* (as required by CEQA; assumes that the project site would be left unchanged; i.e., would remain in its present condition with no urban improvements);
- *Alternative B: Existing Land Use Policies* (assumes development of the project site consistent with the City's current general plan designation and Walpert Ridge Specific Plan policies, yielding approximately 445 housing units on the project site);
- *Alternative C: 500 Units/1.5-Mile Service Area* (assumes that 500 units would be developed on the project site within the 1.5-mile service area of Fire Station No. 5); and
- *Alternative D: Mitigated Alternative* (assumes (1) elimination of development on adjoining East Bay Regional Park District and Roman Catholic Bishop properties; (2) implementation of SEIR-recommended grading, landscape, site, and building design measures; (3) elimination of the proposed golf course; and (4) relocation or reconfiguration of various project features (neighborhood park, golf course maintenance building, Garin Park Lane, swim/tennis club); yielding approximately 445 housing units on the project site).

2. Conclusions

CEQA Guidelines Section 15126(d)(2) stipulates that the SEIR shall identify the "environmentally superior" alternative other than the "no project." Based on the comparative evaluation of the alternatives listed above in section VI of this SEIR, it has been determined that the Mitigated Alternative would result in the least adverse combination of environmental impacts and would therefore be the "environmentally superior" alternatives. It should also be noted that in keeping with the CEQA Guidelines, this "environmentally superior" alternatives identification does not include consideration of such important "non-CEQA" issues as landowner intentions, and comparative fiscal impacts on the City.

E. MITIGATION IMPLEMENTATION

State law (Section 21081.6 of the Public Resources Code) requires all public agencies to adopt reporting or monitoring programs when they approve projects subject to environmental impact reports. As mandated by this law, a mitigation monitoring program must be implemented by the City of Hayward following certification of the Final SEIR for the Blue Rock Country Club Project.

Most of the environmental mitigation measures identified in the Final SEIR could ultimately be adopted as conditions of project approval. As a result, most of these measures would be subject to effective monitoring through the City's normal development review procedures, including post-SEIR processing of the proposed general plan amendment, Walpert Ridge Specific Plan amendments, rezoning to *Planned District*, associated preliminary development plan, precise plan, and subdivision applications, design review approval, building permit approval, and associated plan check and construction period field inspection activities. However, to satisfy state law, a documented record or "checklist" of mitigation implementation would be necessary.

Chapter VIII of this SEIR describes the recommended Mitigation Monitoring Checklist format for City use in meeting the requirements of AB 3180; i.e., in establishing the "who, what, when, and how" aspects for each mitigation measure from this SEIR that is ultimately required. A completed version of this "checklist" will be submitted with the final version of this SEIR. The completed checklist will include the following: (1) a summary of each significant impact identified in the Final SEIR (excerpted directly from the Summary chart in SEIR section II.C); (2) a summary of each mitigation measure identified in the SEIR which has been adopted as a condition of project approval by the City; (3) an identification of the type of monitoring action recommended; (4) an identification of the party responsible for performing and verifying the monitoring action; and (5) an identification of associated timing requirements.

III. PROJECT DESCRIPTION

III. PROJECT DESCRIPTION

This chapter describes the proposed actions or "project" addressed by this SEIR. The project description is based on information contained in the 1991 EIR, the Walpert Ridge Specific Plan, and materials submitted to the City by the project applicant.

As stipulated by the California Environmental Quality Act (CEQA) Guidelines, the project description that follows has been detailed to the extent needed for adequate review and evaluation of environmental impacts. The description includes (a) the location, boundaries, and local setting of the project site; (b) a historical overview of the site and project; (c) a statement of the basic project objectives sought by the applicant; (d) the project's physical and technical characteristics (i.e., proposed land use and circulation layout, public facilities provisions, and other pertinent design aspects); (e) the anticipated project phasing and construction schedule; and (f) the various permits and jurisdictional approvals required to allow construction of the project.

A. PROJECT SETTING

1. Regional Location

As illustrated on Figure 2, the project site is located in the eastern portion of the City of Hayward, in western Alameda County. The unincorporated communities of San Lorenzo and Castro Valley, and the cities of San Leandro and Oakland, are located to the north, Union City and Fremont to the south, San Francisco Bay to the west, and unincorporated Alameda County and the City of Pleasanton to the east. Interstate 880 (I-880) provides regional access to the site via Jackson Street.

2. Local Setting

As illustrated on Figures 3 and 4, the proposed project site is located southeast of Fairview Avenue/Hayward Boulevard in eastern Hayward on Walpert Ridge, a northwest trending ridge that extends from central Hayward to Union City and Fremont and reaches over 1,500 feet in elevation.¹ The site is located approximately six miles east of I-880 via State Route 92, Mission Boulevard, and Carlos Bee Boulevard/Hayward Boulevard; and south of I-580 via East Castro Valley Boulevard, Castro Valley Boulevard, or Foothill Boulevard. The Hayward BART station, located in downtown Hayward, lies approximately six miles west of the site via "B"

¹Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan EIR (Draft, February 22, 1991), page 1.

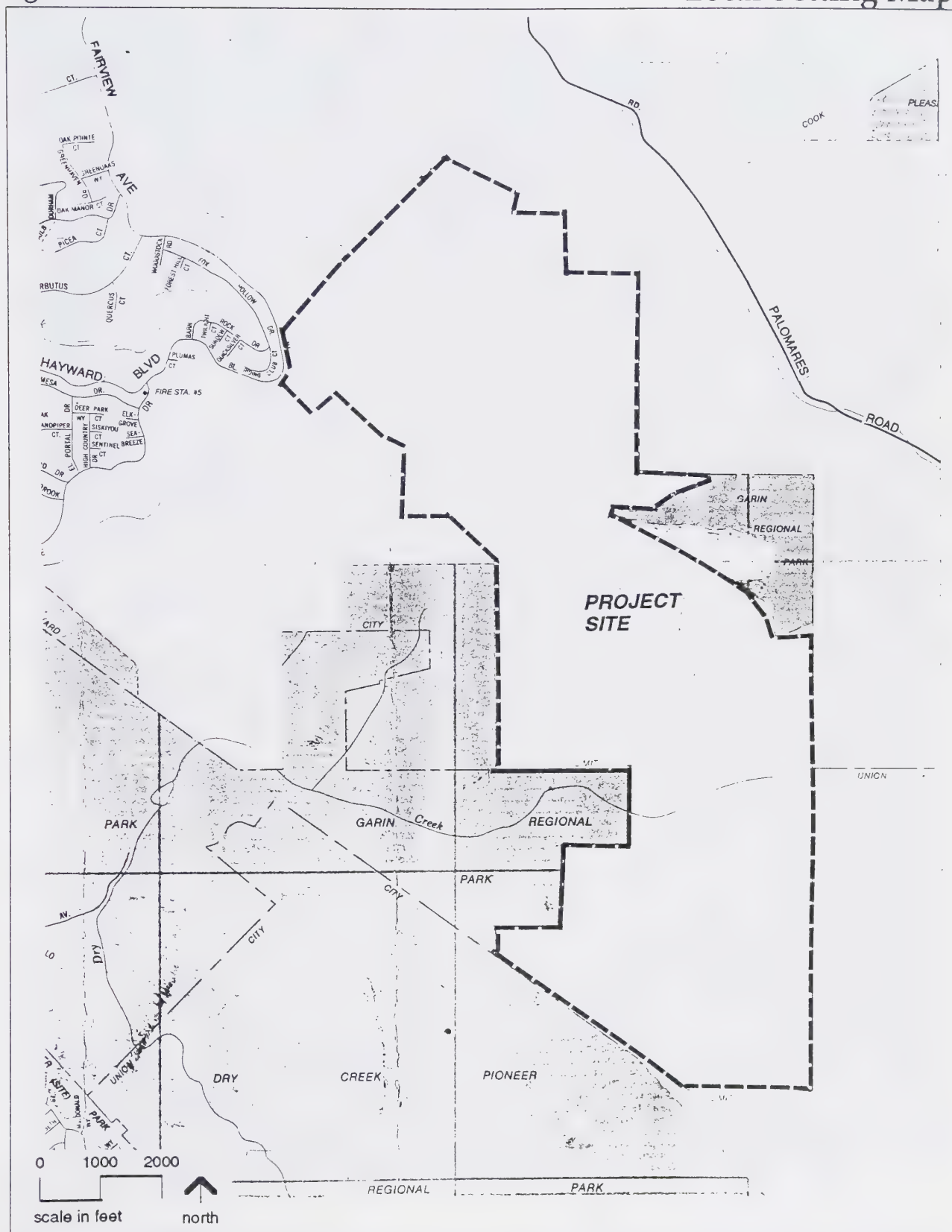
The map displays the Hayward area, including the city of Hayward, the Hayward District, and the Hayward State University. Major roads shown include I-580, I-880, and the Hayward State University. The map also shows the Hayward District, the Hayward State University, and the Hayward State University. The map includes a scale bar (0 to 2000 feet) and a north arrow. An inset map in the top right corner shows the regional location of the project site within the San Francisco Bay Area, highlighting the project site's proximity to Hayward and Fremont.

The map displays the Hayward area, including the city of Hayward, the Hayward District, and the Hayward State University. Major roads shown include I-580, I-880, and the Hayward State University. The map also shows the Hayward District, the Hayward State University, and the Hayward State University. The map includes a scale bar (0 to 2000 feet) and a north arrow. An inset map in the top right corner shows the regional location of the project site within the San Francisco Bay Area, highlighting the project site's proximity to Hayward and Fremont.

The map displays the Hayward area, including the city of Hayward, the Hayward District, and the Hayward State University. Major roads shown include I-580, I-880, and the Hayward Expressway. The map also shows the Hayward Regional Park and the Hayward Industrial Parkway. A scale bar indicates distances up to 2000 feet, and a north arrow is provided. An inset map in the top right corner shows the regional location of the project site within the San Francisco Bay Area, highlighting the project site's proximity to Hayward and Fremont.

Figure 3

Local Setting Map

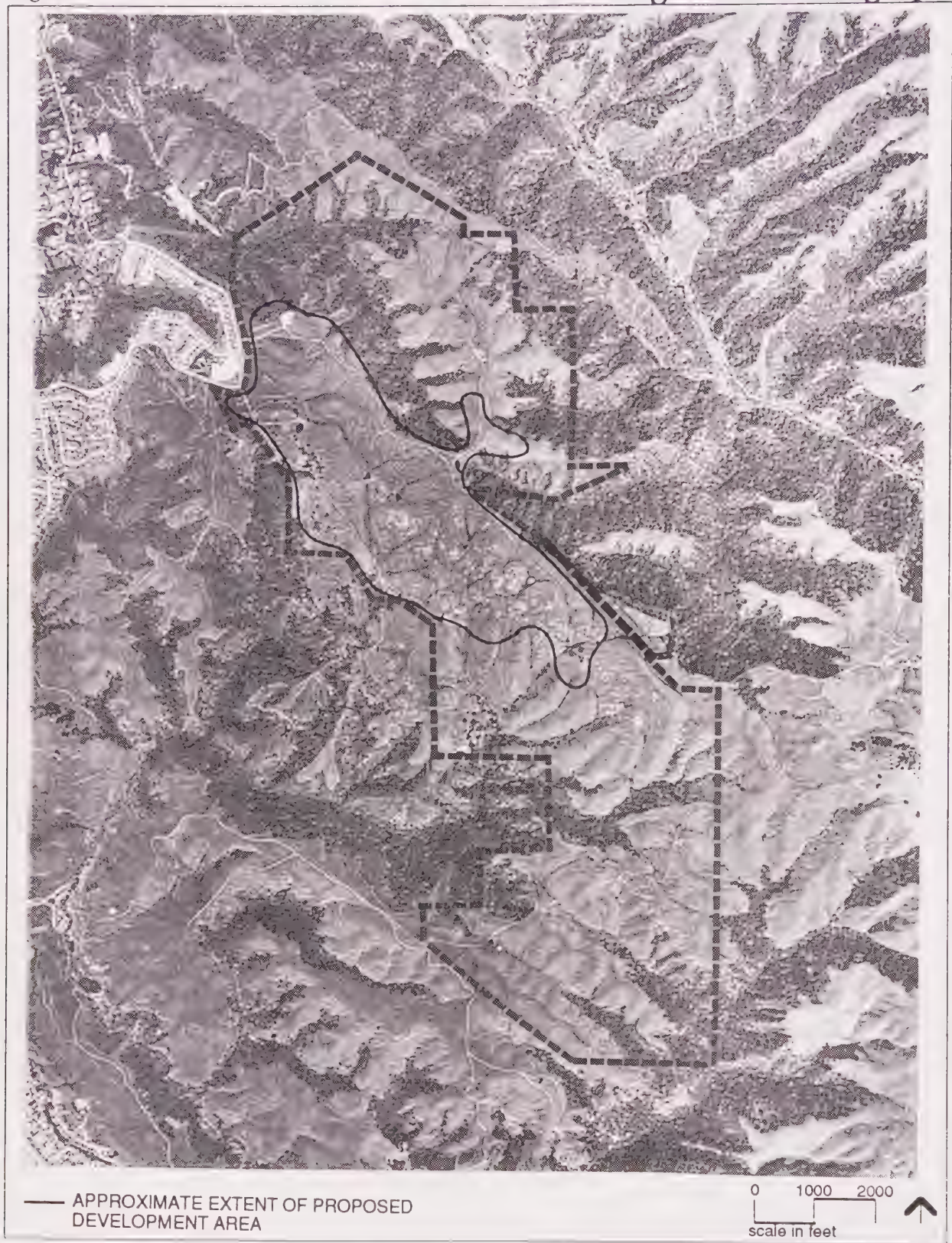


Basemap copyrighted 1993 by the California State Automobile Association.
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Blue Rock Country Club Project SEIR ■ City of Hayward
Wagstaff and Associates ■ Urban and Environmental Planners

Figure 4

Local Setting Aerial Photograph



Street, Mission Boulevard, and Carlos Bee Boulevard/Hayward Boulevard. The Castro Valley BART station (scheduled to open in 1997) lies approximately three miles north of the site via Fairview Avenue, Maud Street, Kelly Street, Center Street, Castro Valley Boulevard, and Norbridge Avenue.

The project site is bounded by open space to the north, the western ridgetop of Palomares Canyon to the east, Dry Creek Pioneer Regional Park and other open space to the south, and Garin Regional Park, other open space, and a 153-unit single-family residential development (the Prominence subdivision, located immediately across Hayward Boulevard) to the west. One currently unoccupied housing unit (the former Meincke residence) is located on East Bay Regional Park District (EBRPD) property immediately west of the 20-acre portion of the project site owned by EBRPD. Five Canyons, a 960-unit residential area, is located north of the project site between Interstate 580, Fairview Avenue, and Palomares Road in Alameda County.¹

Figure 5 shows property ownership on the project site and in the immediately surrounding area. The following land uses are located on properties that are surrounded by the project site, but are not included in the project site (see Figures 4 and 5):

- A single-family residential structure and associated ranch buildings on the Carden property adjoining the northwestern portion of the project site;
- A regional communications tower owned by Pacific Telephone and Telegraph (PT&T) on a one-acre site (along with a mobile access easement) adjoining the northeastern portion of the project site;
- A City of Hayward Police Department communications tower on a 2,500-square-foot parcel (along with a mobile access easement) abutting the PT&T site; and
- A City of Hayward water tank adjoining the northwestern portion of the project site.

3. General Site Characteristics

As shown on Figures 2 and 3, the approximately 1,635-acre, irregularly-shaped project site is located on rolling terrain on Walpert Ridge. The site encompasses 1,558 acres owned by Hayward 1900 (the project applicant), approximately 57 acres owned by the Roman Catholic Bishop of Oakland, and approximately 20 acres owned by the East Bay Regional Park District (see Figure 5). Slopes on the site range from relatively flat (0 to 10 percent slope) to steep (over 30 percent slope).

(a) Physical Characteristics. The project site is defined by a major northwest-southeast trending ridge rising from approximately 1,300 feet near Fairview Avenue to over 1,500 feet at the eastern edge of the property. Several narrow secondary ridges branch off of the main

¹Ibid.

Topographic and Property Ownership Map



ridge. The ridgetop areas are characterized by undulating slopes, annual grasses, and scattered rock outcroppings. These grassland areas are currently used for cattle-grazing.

The slopes surrounding the ridge areas are characterized by oak woodland vegetation with intervening pockets of coastal scrub vegetation (primarily coyote brush and sagebrush). These slopes are relatively steep, with grades typically exceeding 25 percent.¹

The western half of the property is located in the upper reaches of the Dry Creek watershed, which drains into Garin Regional Park west of the project site. The eastern half of the property drains into the Palomares Creek watershed. A small area at the northern end of the property drains into Ward Creek.²

(b) Existing Onsite Development. As shown on Figure 5, the project site is made up of property owned by Hayward 1900, the East Bay Regional Park District, and the Roman Catholic Bishop of Oakland. Existing development on these properties consists of the following (see Figures 4 and 5):

- **The Hayward 1900 property** contains dirt or gravel service roads, barbed wire fencing, and several cattle stock ponds. In addition, a 75-foot-wide PG&E electrical transmission line easement extends in a northwest-southeast direction through the central portion of the property.
- **The Roman Catholic Bishop of Oakland property** to the west of the Hayward 1900 property also contains one currently unoccupied housing unit and associated ranch structures in the southeastern portion of the property.

In addition, portions of the project site are currently used and have historically been used for cattle grazing.³

B. SITE HISTORY

In 1980, the Hayward City Council adopted a specific area plan for Walpert Ridge. This plan was replaced on September 24, 1991, when the City Council adopted the Walpert Ridge Specific Area Plan and certified the accompanying Final EIR. The Specific Area Plan, which covered the current project site and adjacent properties, contained policies that allowed for development of 500 to 700 housing units within a defined ridgetop area located within the 1.5-mile service area radius of Fire Station No. 5 while requiring preservation of the larger remaining area as open space. Policies for the residential community defined lot size criteria,

¹Ibid.

²Ibid.

³Lise Hinman, YCS Investments (project applicant); personal communication, July 1997.

a potential density bonus, and the *Urban Limit Line* that would govern the location of housing. The Specific Area Plan also described development prerequisites for (1) dedication of land for open space, an elementary school, a neighborhood park, and the Bay Area Ridge Trail; (2) off-site traffic improvements; and (3) formation of benefit and assessment districts.¹

On July 25, 1995, the Hayward City Council adopted the Walpert Ridge Specific Plan, which superseded the Walpert Ridge Specific Area Plan. The Specific Plan, prepared in conformance with State Government Code section 65451, addressed outstanding issues pertaining to residential development on Walpert Ridge, such as (1) the allocation of housing units among property owners; (2) conformance with the City's Hillside Design and Urban/Wildland Interface Guidelines; (3) site design, circulation, infrastructure, and fire management standards tailored to the development area; and (4) the locations of park and school sites.²

On July 2, 1996, the Hayward City Council authorized a Memorandum of Understanding (MOU) between the City and Hayward 1900, Inc., the owner of 1,580 acres on Walpert Ridge, to establish a process for involving interested community representatives in the early stages of formulating a development application for the Hayward 1900 property.³ After meeting regularly over a five-month period (from August 1996 to January 1997), the Ad Hoc Committee on Hayward 1900 issued a report to the City Council containing recommendations for a preferred development alternative on the Hayward 1900 property. The committee reached consensus on key issues regarding development of the site, including that the project should consist of a private, gated residential community with an integrated golf course; that the applicant should provide for "upfront" school construction and dedicate land for park, regional trail, and open space use; that padded lots should be permitted; that streets and utilities should be constructed to appropriate City standards; that the applicant should fund construction of an onsite emergency medical service facility as an alternative to a new fire station; and that "realistic" traffic mitigations should be identified through a supplemental EIR. The committee did not reach full consensus on the number of housing units and range of unit types to be developed on the site, or extension of the *Urban Limit Line* to accommodate the project.⁴ The City Council accepted the report on February 4, 1997.

In formulating the development plan for the project site, Hayward 1900 evaluated environmental opportunities and constraints on the site, existing City policies pertaining to the

¹City of Hayward, Walpert Ridge Specific Plan, July 25, 1995, page 4.

²Ibid.

³City of Hayward Agenda Report to Mayor and City Council from Director of Community and Economic Development, re. "Report of the Ad Hoc Committee on Hayward 1900, January 21, 1997.

⁴Ad Hoc Committee on Hayward 1900, Report to the City Council, Recommendations on a Preferred Development Alternative for the Hayward 1900 Property, January 14, 1997.

site, and the economic feasibility of development on the site. Hayward 1900 also consulted with the East Bay Regional Park District, the Hayward Unified School District, the Hayward Area Recreation and Park District, and City of Hayward staff.¹

On March 23, 1997, Hayward 1900, the project applicant, submitted its presently pending development application, which was subsequently revised and/or supplemented in April and May of 1997 and on June 20, 1997. This application is the subject of this SEIR.

C. BASIC PROJECT OBJECTIVES

The basic objectives of the project, as stated by the project applicant,² are as follows:

1. The project's primary objective is the development of a high quality, gated residential/golf course community.
2. To create a sense of place, a destination, through the inclusion of signature landscaping and architectural elements combined with country club amenities providing significant recreational opportunities, including a golf clubhouse, tennis and swim facilities.
3. To provide a variety of housing types and lot sizes that will appeal to a range of potential home buyers and which will add to the overall housing mix in the City.
4. To increase the supply of upscale housing in Hayward, which currently suffers a deficiency in this type of housing. This project will help the City to meet its goal of increasing its tax base and providing an incentive for existing retail businesses to remain in Hayward and for new businesses to locate in Hayward.
5. To provide an 18-hole championship golf course that will increase the likelihood of the project's long-term success and will attract significant revenue to the City.
6. To provide a new school for the City that will help to alleviate overcrowding in Hayward schools and will improve the quality of public educational opportunities available in Hayward.

¹Letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Dyana Anderly, AICP, City of Hayward, re. "Blue Rock Country Club--Comments on ADEIR," July 3, 1997, page 2.

²Attachment (entitled "Blue Rock Country Club Project Objectives") to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Hom, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997.

7. To permanently preserve the maximum amount of open space on Walpert Ridge, thereby minimizing impacts on sensitive biological resources and wildlife and other habitat, preserving the visual prominence of the Ridge and providing additional parkland, including acreage of active play fields.
8. To provide critical trail links to Garin Regional Park and the East Bay Ridge Trail, thereby fulfilling the goal of creating open space opportunities for all City and regional residents and visitors to the Bay Area.
9. To create a fiscally sound and financially feasible project, thereby enhancing the successful construction and continuing viability of the project which in turn will enable the provision of anticipated services, infrastructure and community wide amenities.

D. PROPOSED PROJECT PHYSICAL CHARACTERISTICS

1. Overall Development Concept

The project applicant, Hayward 1900, proposes to develop a private, gated, single-family residential community with an 18-hole golf course, a golf clubhouse, a tennis/swim facility, and a joint elementary school/park site. The project would be developed on an approximately 1,635-acre project site that includes Hayward 1900's 1,558-acre property, 57 acres of adjacent property owned by the Roman Catholic Bishop of Oakland, and 20 acres of adjacent property owned by the East Bay Regional Park District.

Figure 6 illustrates the preliminary development plan proposed by the applicant. As shown on the figure, the northern portion of the project site would be developed as a 650-unit single-family residential area, and the northern and middle portions would contain an 18-hole golf course. The first nine holes of the golf course would extend generally around the perimeter of the residential area. The remaining northeastern- and southern-most portions of the site would be preserved as open space.

2. Planning and Design Objectives

The Blue Rock Country Club project has been designed as a "comprehensive planned, recreation-oriented, country club community."¹ The stated intent of the associated site planning and landscape guidelines is to "establish a common visual landscape theme by unifying the various elements which make up the community." The design concept includes use of consistent theme walls, fences, monuments, signage, drought-tolerant and indigenous

¹Bryan Grunwald Associates and Fee Munson Ebert, Preliminary Blue Rock Country Club Design Guidelines, May 23, 1997.

Figure 6

Proposed Preliminary Development Plan



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

plant materials, neighborhood parks, parkways, and open space areas. The design theme is to create "a natural setting with the historic flavor of Spanish California."

3. Land Use Layout

Table 2 shows the proposed land uses by gross acreage. As indicated in the table, the project would contain approximately 145 acres of residential uses, 331 acres of golf course and associated uses, a 6.3-acre elementary school with an adjoining five-acre public neighborhood park, 6.5 acres of private village mini-parks, and a 5.5-acre swim and tennis club. Rights-of-way for major roads and other utilities would occupy 32 acres, and the remaining approximately 1,100 acres would be devoted to open space. Of this 1,100-acre total, 40.7 acres would be maintained by the local homeowners' association, and 1,061.0 acres would be dedicated to the East Bay Regional Park District or other public agency, deeded to the homeowners' association, or retained by Hayward 1900 as open space.

(a) Residential Development. As shown in Figure 6, the proposed residential area has been divided into seven neighborhood clusters (A through G). Table 3 indicates the proposed number of housing units by lot size in each neighborhood cluster. As shown in the table, proposed lot sizes range from 5,000 to 10,000 square feet or more. The 650-unit total would consist of 47 units (seven percent) on 5,000-square-foot lots, 271 units (42 percent) on 5,500-square-foot lots, 203 units (31 percent) on 6,000-square-foot lots, 19 units (three percent) on 7,000-square-foot lots, 76 units (12 percent) on 7,500-square-foot lots, 16 units (two percent) on 8,000-square-foot lots, and 18 units (three percent) on lots of 10,000 square feet or more.

As illustrated in Figure 6, neighborhood clusters A through F (616 total units) would extend south from Fairview Avenue/Hayward Boulevard along a series of rolling hills on the west side of the PG&E easement. Cluster G, which would contain 34 larger-size (8,000- to over 10,000-square-foot) lots, would be located east of the PG&E easement in a steeper portion of the site.

(b) Golf Course Development. The proposed project includes an 18-hole, championship-length¹ golf course and associated facilities, including a full-size practice range, a clubhouse, and a maintenance center. The applicant states that "the Walpert Ridge site has the potential to accommodate one of the most dramatic and challenging golf courses in the Bay Area,"²

¹A "championship" or regulation golf course is typically par 70 or greater and 6,000 yards or greater in length from the men's or middle tees. Based on the applicant's preliminary routing plan, the proposed golf course would measure approximately 7,000 yards from the championship tees, with a par of 72. Other tee locations (blue, white, gold, and red) would measure 5,600 to 6,600 yards, with a par of 72. (Letter from Daniel Bucko, Golf Course Architect/Land Planner, Bryan Grunwald Associates, to Joanna Callenbach, YCS Investments, re. "Walpert Ridge Golf Course Summary," May 23, 1997; and re. "Amendments to the Walpert Ridge Golf Course Summary dated May 23, 1997," June 19, 1997.)

²Ibid.

Table 2
PROPOSED LAND USES BY GROSS ACREAGE

<u>Proposed Land Use</u>	<u>Gross Acres (rounded)</u>
Single-Family Residential	145.0
Golf Course, Clubhouse, Maintenance Area, Practice Range*	333.0
Elementary School	6.3
Neighborhood Park (public)	5.0
Private Neighborhood Parks	6.5
Swim and Tennis Club	5.5
Major Road Rights-of-Way and Utilities**	32.0
Homeowners' Association-Maintained Open Space***	40.7
Other Open Space Areas****	1,061.0
TOTAL:	1,635.0*****

* Includes some unirrigated natural open space.

** Includes detention basins and potential future telecom sites.

*** Includes some acreage within the planned development area that may ultimately be dedicated to the East Bay Regional Park District or other public agency.

**** To be dedicated to the East Bay Regional Park District or other public agency.

***** This total includes property owned by Hayward 1900 (approximately 1,558 acres), the Roman Catholic Bishop (approximately 57 acres), and the East Bay Regional Park District (approximately 20 acres). The development plan currently shows a small area of the golf course (approximately two acres) on property owned by the Roman Catholic Bishop located to the east of the Hayward 1900 property. This area is included in the 1,635 acres comprising the site, but will likely be modified as the golf course final design is developed.

SOURCE: Hayward 1900

Table 3
NUMBER OF HOUSING UNITS BY NEIGHBORHOOD CLUSTER AND LOT SIZE

Neighborhood* Cluster	No. of Units by Minimum Lot Size (square feet)**							Total No. of Units
	<u>5,000</u>	<u>5,500</u>	<u>6,000</u>	<u>7,000</u>	<u>7,500</u>	<u>8,000</u>	<u>10,000+</u>	
A	--	168	--	--	--	--	--	168
B	47	--	23	5	21	--	--	96
C	--	44	24	5	21	--	--	94
D	--	37	38	5	10	--	--	90
E	--	22	61	--	6	--	--	89
F	--	--	57	4	18	--	--	79
G	--	--	--	--	--	16	18	34
TOTAL:	47	271	203	19	76	16	18	650
Percent of Total	7	42	31	3	12	2	3	100

* See Figure 6 for neighborhood cluster locations.

** In certain cases, according to the project applicant, "minimum" lot size consists of useable pad area and does not include slopes at the side or rear of lots.

SOURCE: Hayward 1900

based on the exposed ridgetop location, wide-spanning views, and varied terrain. The plan proposes a "high quality" golf course of "championship length" over the northern and central portions of the project site. The golf course holes would be routed through the varying topography of the site, with a number of uphill and downhill holes. The holes would run predominantly parallel to the northwest trending ridge to minimize uphill and downhill climbs.

As shown on Figure 6, the first nine holes of the golf course would extend around the perimeter of Neighborhoods B through F, and holes 10 through 18 would be located immediately south of Neighborhoods C and E in the middle portion of the project site. The clubhouse, practice range, and an approximately 200-space parking lot would be located immediately south of Neighborhood C, and the 5,000-square-foot golf course maintenance center would be located southwest of Neighborhood E. The 32,400-square-foot clubhouse would include club facilities (e.g., meeting rooms, convenience retail), a restaurant and lounge areas, and a swimming pool. Figure 7 illustrates the general layout of the clubhouse area.

The golf course would contain three lakes (see Figure 6): 2.4-acre Lake A, located east of holes 10 and 11; 1.65-acre Lake B, located between holes 11 and 12; and 0.38-acre Lake C, located immediately east of the golf course parking lot, between holes 1 and 2. Lake A would be used for irrigation storage, and the other two lakes would serve aesthetic and strategic purposes on the golf course and have some limited run-off retention potential. The storage capacities of Lakes A, B, and C would be 24.0 acre-feet, 9.4 acre-feet, and 2.1 acre-feet, respectively.¹

(c) Swim and Tennis Club. The project would include a swim and tennis club, to be located in the eastern portion of the site on the west side of residential neighborhood G. Figure 7 illustrates the general layout of the swim and tennis club area. The 6,750-square-foot complex would contain club facilities, convenience retail, five to eight tennis courts, a swimming pool and hot tub, and an approximately 70-space parking lot.

(d) Elementary School/Park Site. The current project plans include a 6.3-acre school site and an adjoining five-acre public park site located on the south side of Fairview Avenue/Hayward Boulevard in the northwest corner of the proposed residential development area, immediately outside the project entry gate (see Figure 7). The applicant is currently negotiating with the Hayward Unified School District (HUSD) to determine whether the applicant would dedicate the school site to the HUSD, pay school impact fees to the HUSD, or provide other school mitigation acceptable to the HUSD. If the elementary school is constructed on the site, the project, in the first phase of project development, would include construction of an approximately 54,794-square-foot elementary school, consisting of (1) classrooms for 350 students, and (2) "core" facilities (e.g., library, multipurpose room,

¹Letter from Daniel Bucko, Golf Course Architect/Land Planner, Bryan Grunwald Associates, to Joanna Callenbach, YCS Investments, re. "Walpert Ridge Golf Course Summary," May 23, 1997; and re. "Amendments to the Walpert Ridge Golf Course Summary dated May 23, 1997," June 19, 1997.

Figure 7



restrooms, offices) of adequate size to accommodate the initial 350-student school enrollment. The school, which would serve students from the proposed project, and would be "modular," allowing the Hayward Unified School District to construct additional facilities on the site over time.¹

The joint school/park facility would include play courts and ball fields, including two soccer fields (see Figure 7). The park site would be dedicated to the City of Hayward and then placed under a Master Lease Agreement with the Hayward Area Recreation and Park District (HARD) to allow for development and maintenance of the park by HARD.

The proposed 44-space parking lot of the joint school/park facility would also serve as a trail staging area for access to Garin Regional Park, which adjoins the southwest boundary of the project site. Garin Park Lane would serve as the trail link to the regional park (see further discussion under "i. Vehicular and Pedestrian Circulation" below).

(e) Private Village Mini-Parks. The proposed residential area would contain nine private village mini-parks, ranging in size from approximately one-half to one acre (see Figure 6). The local homeowners' association would be responsible for maintaining these parks.

(f) Open Space. Figure 8 illustrates the extent of the area proposed to remain as open space. As shown on the figure, the northeastern and southern portions of the project site would contain open space that the applicant intends to dedicate to the East Bay Regional Park District or other public agency.² The applicant intends to allow the East Bay Regional Park District to provide a continuous Bay Area Ridge Trail link through this portion of the site to Garin Regional Park.³ Generally, other open space that immediately surrounds the proposed residential areas and is not part of the proposed golf course would be maintained by the local homeowners' association (see Figure 8). A final delineation of open space areas would be made at the final design stage.

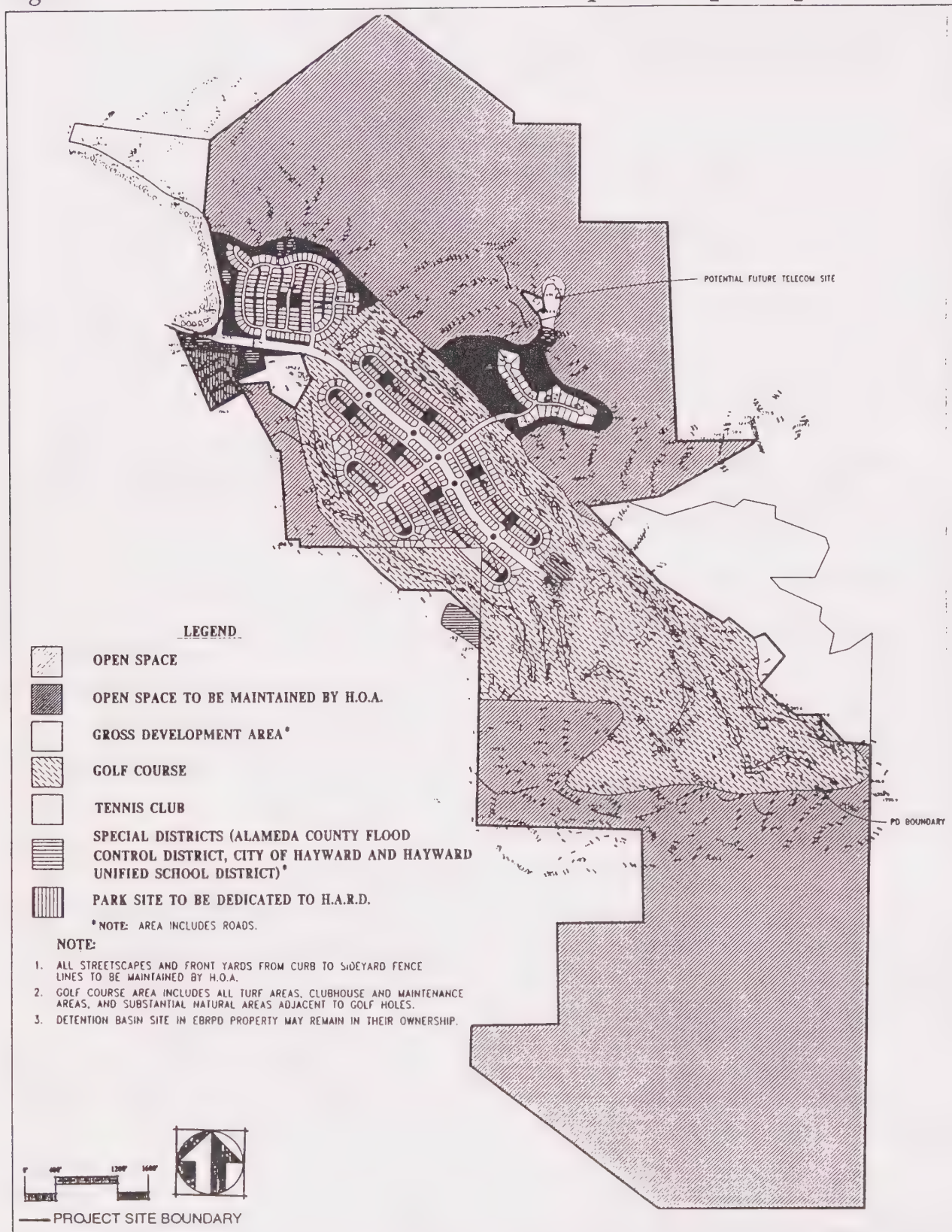
¹"Hayward 1900 Property, Catholic Church Property, and A Portion of the East Bay Regional Park Property, Walpert Ridge, Revised Development Permit Application, Blue Rock Country Club Project, City of Hayward, Alameda County" (attachment to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Horn, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997).

²Letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant), to Natalie Macris, Wagstaff and Associates, re. "Blue Rock Country Club Project--Responses to Questions Regarding Project Description," June 16, 1997.

³"Hayward 1900 Property, Catholic Church Property, and A Portion of the East Bay Regional Park Property, Walpert Ridge, Revised Development Permit Application, Blue Rock Country Club Project, City of Hayward, Alameda County" (attachment to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Horn, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997).

Figure 8

Proposed Open Space Areas



(g) Other Facilities. The project would contain the following additional facilities (see Figures 6 and 8):

- Two water tanks, located immediately northwest of Neighborhood G (see Figure 6). The two tanks would have a total storage capacity of approximately 2.3 million gallons,¹ and would provide water for fire, emergency, and operational purposes (except for golf course irrigation, which will be provided by onsite irrigation storage lakes). The applicant intends to dedicate the water tank site to the City of Hayward² (see Figure 8).
- Potential future telecom sites, located north of the water tank area in the vicinity of the existing PT&T and City of Hayward Police Department communications towers (see Figures 5 and 6). This area may be used for siting telecommunications facilities that may be needed or desired by the property owner, the homeowners' association, or third parties. This area (exact acreage to be determined) would be excluded from the open space areas to be dedicated to the East Bay Regional Park District.³
- Relocated pipe and access road for an existing water tank, located north of Neighborhood A (see Figure 6). The water tank site has already been dedicated to the City of Hayward (see Figure 8). The pipe and road access to the tank, which currently extend off Fairview Avenue, would be relocated through Neighborhood B via the proposed road network.⁴
- An 0.5-acre detention basin (with eight acre-feet of storage capacity) on the west side of Neighborhood A. While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see section IV.F, Drainage and Water Quality). Alternatively, the detention basin may be owned and maintained by the homeowners' association.⁵
- A 0.7-acre detention basin (with 12 acre-feet of storage capacity) located immediately south of the proposed entry gate (see Figure 6). While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see

¹Carlson, Barbee & Gibson, Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads, and Grading, for Hayward 1900 Property, Hayward, California, revised June 11, 1997, page 5.

²Wider, June 16, 1997.

³Wider, June 16, 1997.

⁴Wider, June 16, 1997.

⁵Wider, June 16, 1997.

section IV.F, Drainage and Water Quality). Alternatively, the detention basin may be owned and maintained by the homeowners' association.¹

- A 2.0-acre detention basin (with 30 acre-feet of storage capacity) located immediately north of the golf course maintenance center (see Figure 6). While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see section IV.F, Drainage and Water Quality). Alternatively, the detention basin may be owned and maintained by the homeowners' association.²
- A 0.6-acre detention basin (with 10 acre feet of storage capacity) located north of the proposed tennis/swim club (see Figure 6). While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see section IV.F, Drainage and Water Quality).³ Alternatively, the detention basin may be owned and maintained by the homeowners' association.⁴

4. Architectural and Landscape Design

The applicant-prepared statements of project architectural and landscape design features are summarized below, as submitted by the applicant. (The independent findings of this EIR with respect to the visual impacts of the project, and associated mitigation needs, are described later in section IV.B of this report.)

(a) Architectural Design. The applicant-proposed project Preliminary Design Guidelines state that project building design "will reflect a Mission, Spanish Colonial or Monterey style," and that "the golf clubhouse, tennis and swim club, school, common walls, bridges, and entry guard houses and gates will reinforce this architectural aesthetic." Encouraged architectural elements will include rustic cut or cast stone, textured (heavy dash) plaster surfaces, ornamental plaster walls, wooden balconies, window shutters, wrought iron construction, and shallow gable roofs with barreled terra cotta tile.

Building Color. The applicant-proposed Preliminary Guidelines (page 5) state that, in general, building walls will be "light umbria in color" (tan) "to complement the...surrounding landscape."

¹Wider, June 16, 1997.

²Wider, June 16, 1997.

³Preliminary Blue Rock Country Club Design Guidelines, prepared by Bryan Grunwald Associates and Fee Munson Ebert, May 23, 1997.

⁴Wider, June 16, 1997.

(b) Landscape Design. The project Preliminary Design Guidelines call for revegetation of all landscape areas after disturbance, including the golf course, streetscapes, neighborhood and community parks, entry landscape, residential front yard landscapes, and "interface" areas between the project development area and the undisturbed natural landscape.

Golf Course. The applicant-proposed Preliminary Guidelines state that the golf course will have a "natural oak woodland landscape that mimics the naturalized landscape of the Hayward hills."

Streets. Street landscapes will include ordered plantings of street trees to provide shade and structure to the roadways and neighborhoods. Some streetscapes will have a combination of quicker-growing street trees such as Sycamores and Raywood ash, alternated with slower-growing oaks.

Lot Lines and Neighborhood Parks. Areas adjacent to housing lot lines and within neighborhood parks will be more densely planted with shrubs and trees to provide privacy and to enclose the parks.

Rock Outcroppings. The Guidelines indicate that "where possible, rock outcrops disturbed during grading will be salvaged and placed in informal landscaped areas such as the golf course, larger landscaped zones, and visible slopes areas," and "oaks and other native species will be planted around the reconstructed rock outcrops."

5. Vehicular and Pedestrian Circulation

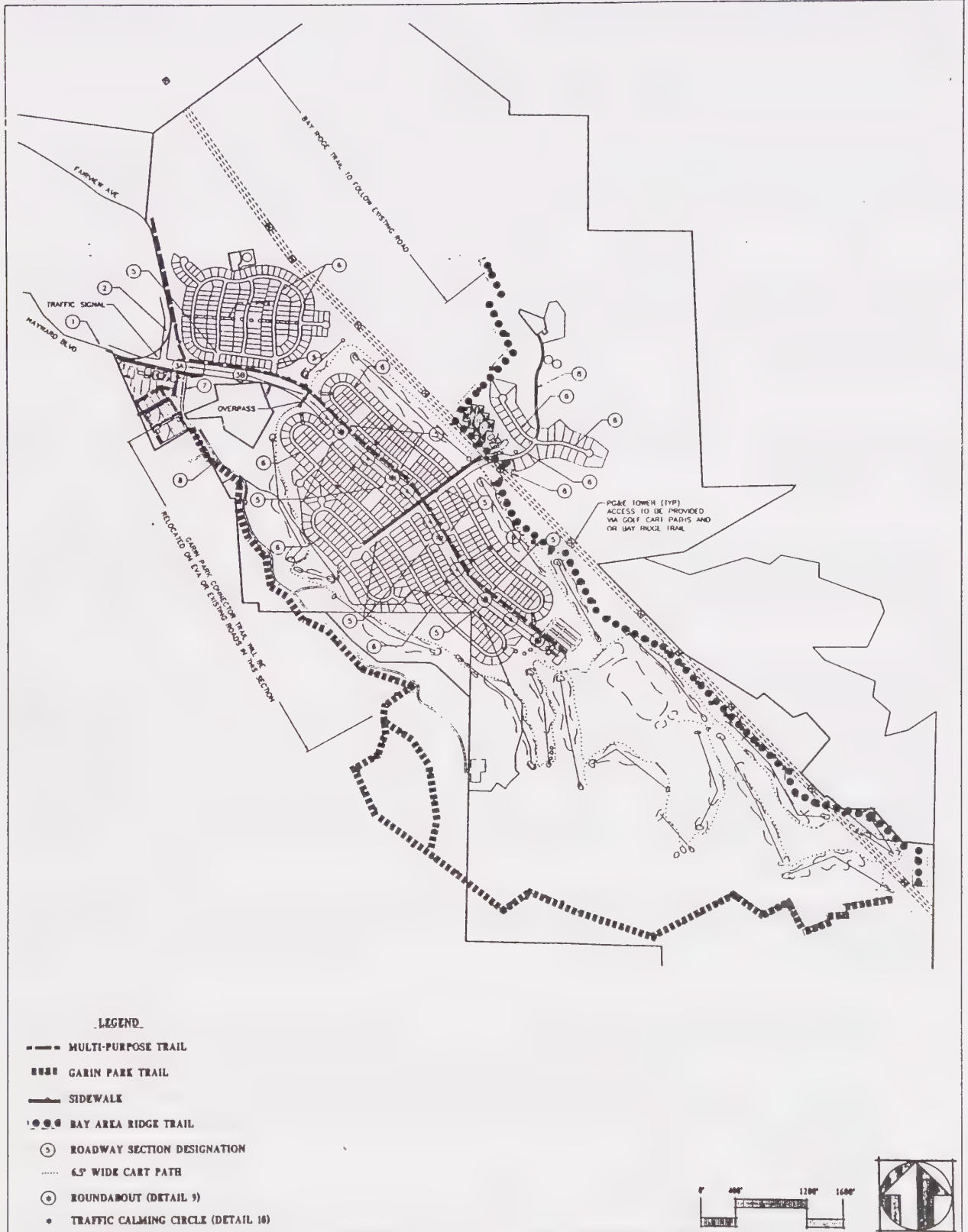
Figure 9 illustrates the proposed roadway and trail circulation plan for the project. The project would be served by a main entry road, extending from the project gate to the golf course clubhouse. Smaller neighborhood-serving roads would intersect the entry road and provide access to residential areas. All roadways within the project would be private, and would be maintained by the local homeowners' association.

(a) Roadway Specifications. Figure 10 shows typical roadway cross-sections proposed for the project. As shown in the figure, the project would contain the following general roadway classifications:

- **Hayward Boulevard/Fairview Avenue.** These road rights-of-way would be a total of 72 feet wide, including an 18-foot-wide landscaped parkway on one side and a parkway and multi-purpose trail (17 feet to 22 feet in total width) on the other side. Hayward Boulevard would contain one 13-foot-wide travel lane in each direction, separated by an eight-foot median. Fairview Avenue would contain a 32-foot-wide right-of-way for travel lanes.
- **Project Entry Road.** The project entry road would range from 116 to 124 feet in total width. From the project site boundary to the entry gate, the right-of-way would contain a 10-foot-wide landscaped parkway and an eight- to ten-foot-wide sidewalk or trail on either

Figure 9

Proposed Circulation Plan

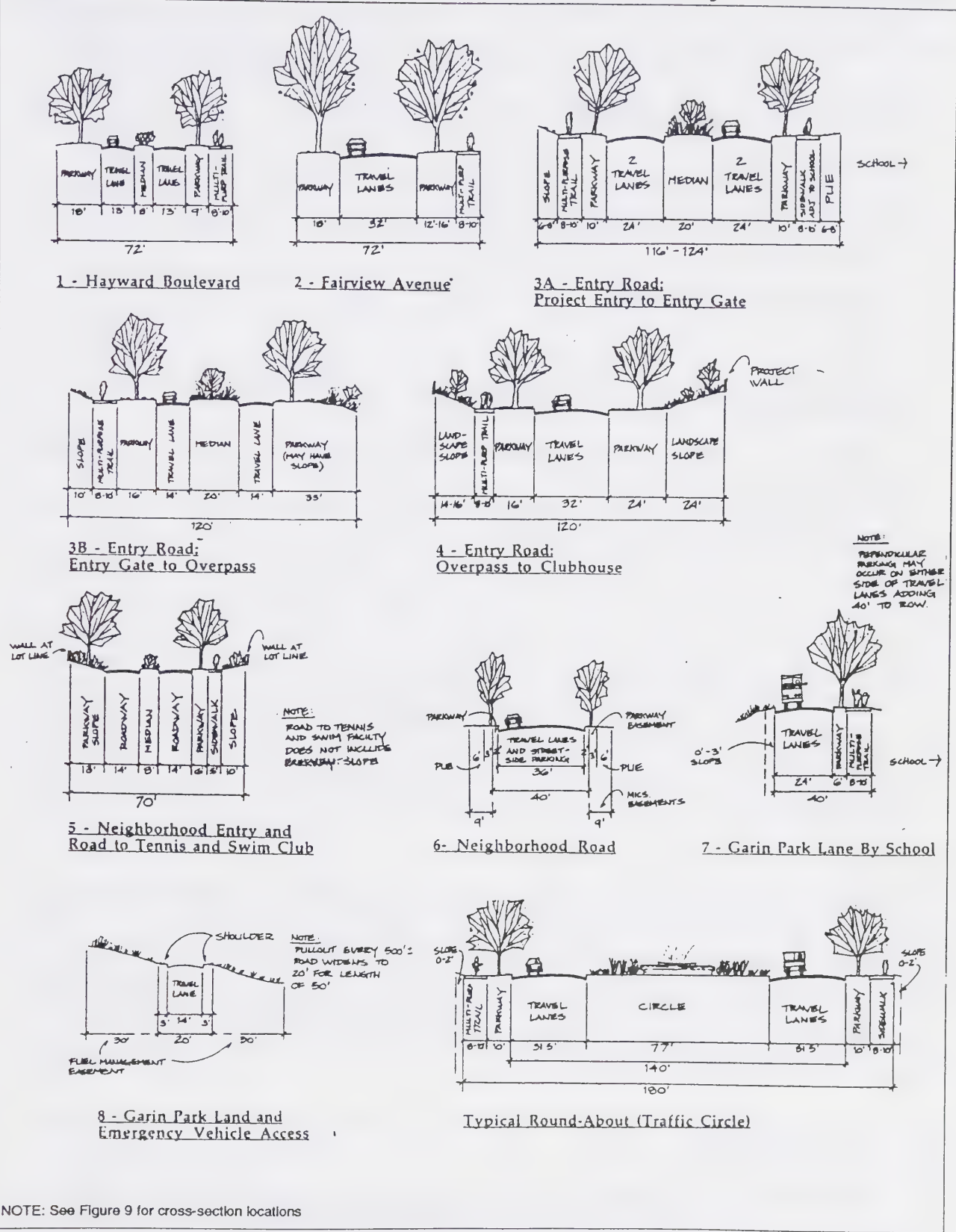


SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
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Figure 10

Proposed Roadway Cross-Sections



NOTE: See Figure 9 for cross-section locations

side. Two travel lanes (24-feet-wide each) would extend in either direction, separated by a 20-foot-wide landscaped median. From the entry gate to the pedestrian overpass just beyond Neighborhood A, the road would contain one 14-foot-wide travel lane in each direction, with a 35-foot-wide parkway on southwest side and a 16-foot-wide parkway and an eight- to ten-foot-wide multi-purpose trail on the northeast side. At the overpass, the center landscaped median would end. From the overpass to the golf clubhouse, the road would contain a 32-foot-wide right-of-way for travel lanes, with 48 feet of parkway and landscaped slope on the southwest side and a 16-foot-wide parkway and an eight- to ten-foot-wide multi-purpose trail on the northeast side.

- **Neighborhood Entry Roads.** These roads would provide the main access to Neighborhoods A through G, as well as the swim and tennis club. These road rights-of-way would be 70 feet wide. They would contain a 14-foot-wide travel lane in each direction, separated by an eight-foot-wide median, with a five-foot-wide sidewalk and a six-foot-wide landscaped parkway on one side.
- **Neighborhood Roads.** These roads would extend off the neighborhood entry roads to provide access to individual lots. These road rights-of-way would provide 36 feet of width for travel lanes and on-street parking, with two-foot-wide parkways and nine-foot-wide parkway and public utility easements on either side.
- **Garin Park Lane.** This roadway would provide access off the project entry road to the joint school/park site and then generally south along the western site boundary, ending at the golf course maintenance center. Adjacent to the school site, the lane would contain a 24-foot-wide right-of-way for travel lanes, with an eight- to ten-foot-wide multi-purpose trail on the west side. South of this point, the lane would serve as a trail and access road for emergency vehicles, golf course maintenance vehicles, and golf course green waste refuse trucks; this road section would contain a 14-foot-wide travel lane with three-foot-wide shoulders and 30-foot-wide "fuel management easements" (for fire truck access to undeveloped open space areas) on either side. Every 500 feet, the lane would widen to 20 feet for a distance of 50 feet.

As a traffic calming measure, roundabouts, or traffic circles, would be located at five points along the project entry road: at the golf clubhouse, and at four intersections with neighborhood entry roads. As shown in Figure 10, the traffic circles would be 77 feet in diameter, and would be surrounded by a 31.5-foot-wide right-of-way for travel lanes, ten-foot-wide parkways, and eight- to ten-foot-wide sidewalks or multi-purpose trails. In addition, a total of eight traffic circles would be provided along neighborhood roads for traffic calming purposes (see Figure 10).

(b) Trails and Sidewalks. As shown in Figure 9, the project would provide right-of-way for the following trails and sidewalks:

- **Garin Park Trail,** which would extend from the joint school/park site southeast along Garin Park Lane. As indicated in Figure 9, a portion of the existing access road to the northern section of Garin Regional Park would be relocated onto Garin Park Lane.

- **Bay Area Ridge Trail**, which would extend through the southern portion and in the central portion of the project site between the golf course and the swim/tennis club, along the east side of the golf course, and around Neighborhood G.
- **A multi-purpose trail**, which would extend from the project entry along the northeast side of the project entry road to the golf clubhouse.
- **Sidewalks**, which would extend (1) from the golf clubhouse into Neighborhood C; (2) across the project entry road between Neighborhoods C and E, Neighborhoods B and D, and along the golf cart overpass northwest of Neighborhoods B and D; and (3) along the neighborhood entry road connecting Neighborhoods F, D, B, and G.

6. Grading

The project development area is proposed to be mass graded in order to achieve the desired development capacity.¹ The estimated grading quantity would be approximately 7.8 million cubic yards and would be balanced within the site.²

Grading would also be required in many areas to create the desired golf course fairways, rough, green and tee sites. The golf course grading plan has been designed to create a rounded visual character to the finished topography without sharp falls or angles.

7. Infrastructure

(a) Storm Drainage. The project would include an internal storm drainage system of inlets and small diameter pipes to collect and convey storm water runoff from lots, streets, golf course, and common areas. The storm drain pipes would convey flows into onsite detention basins. The detention basins would be used to regulate peak stormwater discharges into the downstream drainage network. In addition, the golf course design would include a number of infiltration and detention features.

(b) Water. There are no existing water facilities onsite. New facilities would be needed to provide water supply to the project homes and golf course. The proposed domestic water system would consist of transmission and distribution mains, a booster pump station, and two new 1,520-gallon water tanks. The proposed golf course would contain one lake (Lake A) that would provide supplemental water storage for irrigation. Golf course irrigation demands would be met through a combination of delivery from the municipal supply and water storage in onsite irrigation ponds. (See section IV.H.4 for more information on project water needs.)

¹Carlson, Barbee & Gibson, Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads and Grading for Hayward 1900 Property, Hayward, California; revised June 11, 1997.

²Ibid.

(c) Sewer. There are no existing sanitary sewer facilities onsite. New facilities would be needed to provide sewer service to the project. The new system would consist of onsite gravity sewer lines and offsite parallel relief sewer mains. The lines would be constructed within or adjacent to streets whenever possible. (See section IV.H.5 for more information on project sewer service needs.)

E. PROPERTY OWNERSHIP AND MAINTENANCE

1. Ownership

(a) Homeowners. The project applicant, Hayward 1900, intends to develop the project as a planned development, with each homeowner purchasing (1) a fee interest in an individual lot, and either (2) an undivided interest in the project common area along with all owners or (3) conveyance of the common area parcels to a homeowners' association.

(b) Golf Course. Hayward 1900 would either (1) own the golf course, golf clubhouse, and practice range and lease the management of these facilities to a golf course operator, or (2) sell the facilities to a separate golf course operator.¹

(c) Onsite Land Dedications. The applicant is currently negotiating dedication of the joint school/park site to the Hayward Unified School District (HUSD) and Hayward Area Recreation and Park District (HARD). If the joint school/park site is dedicated to these agencies, HUSD and HARD would be responsible for establishing an arrangement for joint use of the site.

The applicant would dedicate open space areas in the northeastern and southern portions of the project site to the East Bay Regional Park District or other public agency.²

(d) Property Exchanges and Purchases. The project includes property exchange or purchase between the applicant (Hayward 1900) and two adjoining property owners (East Bay Regional Park District and Roman Catholic Bishop of Oakland), as follows:³

- **East Bay Regional Park District property.** Hayward 1900 intends to enter into a land exchange agreement with the East Bay Regional Park District (EBRPD) to exchange the 20-acre EBRPD parcel that would be included in the development area (see Figure 5) for approximately 1,000 acres of onsite open space that would be dedicated to EBRPD. As

¹Hayward 1900, "Blue Rock Country Club Project, Statement Regarding Ownership and Maintenance (650 Units)," May 23, 1997.

²Wider, June 16, 1997.

³Wider, June 16, 1997.

shown in Figure 6, the preliminary development plan provides for construction of a road (the "E Loop"), associated utilities, and a portion of the golf course on the EBRPD parcel.

If approved by the EBRPD Board of Directors, Hayward 1900 would take fee title of the 20-acre parcel. This action would most likely occur over a two-year period because of a state law that prohibits the EBRPD from conveying more than 10 acres in any given year. Dedication of land to the EBRPD is intended to occur in phases in conjunction with project buildout.

In addition, any agreement between Hayward 1900 and the EBRPD would provide easements as appropriate for any other activity (e.g., slope easement, placement of fill, detention/water quality basin) that would occur on EBRPD property that would not be transferred to Hayward 1900. Any agreement would also provide for use of portions of the dedicated open space as mitigation areas for wetlands and other biological resources affected by the project.

- **Roman Catholic Bishop of Oakland property.** Hayward 1900 is currently negotiating a purchase agreement with the Roman Catholic Bishop of Oakland. The current intention is that Hayward 1900 would ultimately purchase the 57-acre Roman Catholic Bishop property that is included in the development application (see Figure 5) and develop this property along with the Hayward 1900 property. The proposed development application and proposed revisions to the 1995 Walpert Ridge Specific Plan (see subsection F, "Proposed Project Approvals," below) allocate 47 housing units to the Roman Catholic Bishop property. Because the Hayward 1900 and Roman Catholic Bishop properties have been combined on the proposed preliminary development plan, not all 47 units would be constructed within the boundaries of the Roman Catholic Bishop parcel. As shown on Figure 6, the preliminary development plan provides for construction of the golf course maintenance center, all or portions of 37 residential lots, and a portion of the golf course on this parcel.

2. Maintenance

The homeowners' association would maintain all common areas (e.g., streets, landscaped areas, gatehouse/entryway, small parks, swim and tennis club) and perform certain maintenance responsibilities, such as fire hazard abatement.

F. PROPOSED PROJECT PHASING AND CONSTRUCTION SCHEDULE

The applicant proposes to construct the project in two main phases, as follows:¹

- **Phase I.** This phase would consist of mass grading of the entire site, construction of the elementary school facilities (i.e., classrooms for 350 students, plus library, multipurpose room, restrooms, and offices) (if a mutually acceptable agreement is negotiated between the applicant and the Hayward Unified School District), and construction of some of the single-family houses (in 100-house increments, based on market demand and other factors). School construction would begin upon issuance of the building permit for the twenty-fifth housing unit in the development. Construction of the golf course would begin in this phase, with either construction of all 18 holes or possibly only nine holes, depending on the market demand, the role of the golf course in the project's housing marketing strategy, and the possible involvement of a separate golf course owner/developer.² Based on similar factors, construction of the golf clubhouse and swim/tennis club may take place during the first phase. All or a portion of the roads would be constructed during this phase.
- **Phase II.** The second phase would consist of construction of housing and any portions of the golf course and roadways not constructed in Phase I. The golf clubhouse and swim/tennis club would be constructed during this phase if they have not been built during Phase I.

The total buildout period for the project is currently estimated at five to six years from project approval.³

G. REQUIRED PROJECT APPROVALS

1. City of Hayward

The project as currently proposed would involve the following approvals by the City of Hayward:⁴

¹Hayward 1900, "Blue Rock Country Club Project, Delineation of Project Phasing (650 Units)," May 23, 1997.

²Wider, June 16, 1997.

³Wider, June 16, 1997.

⁴"Hayward 1900 Property, Catholic Church Property, and A Portion of the East Bay Regional Park Property, Walpert Ridge, Revised Development Permit Application, Blue Rock Country Club Project, City of Hayward, Alameda County" (attachment to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Hom, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997).

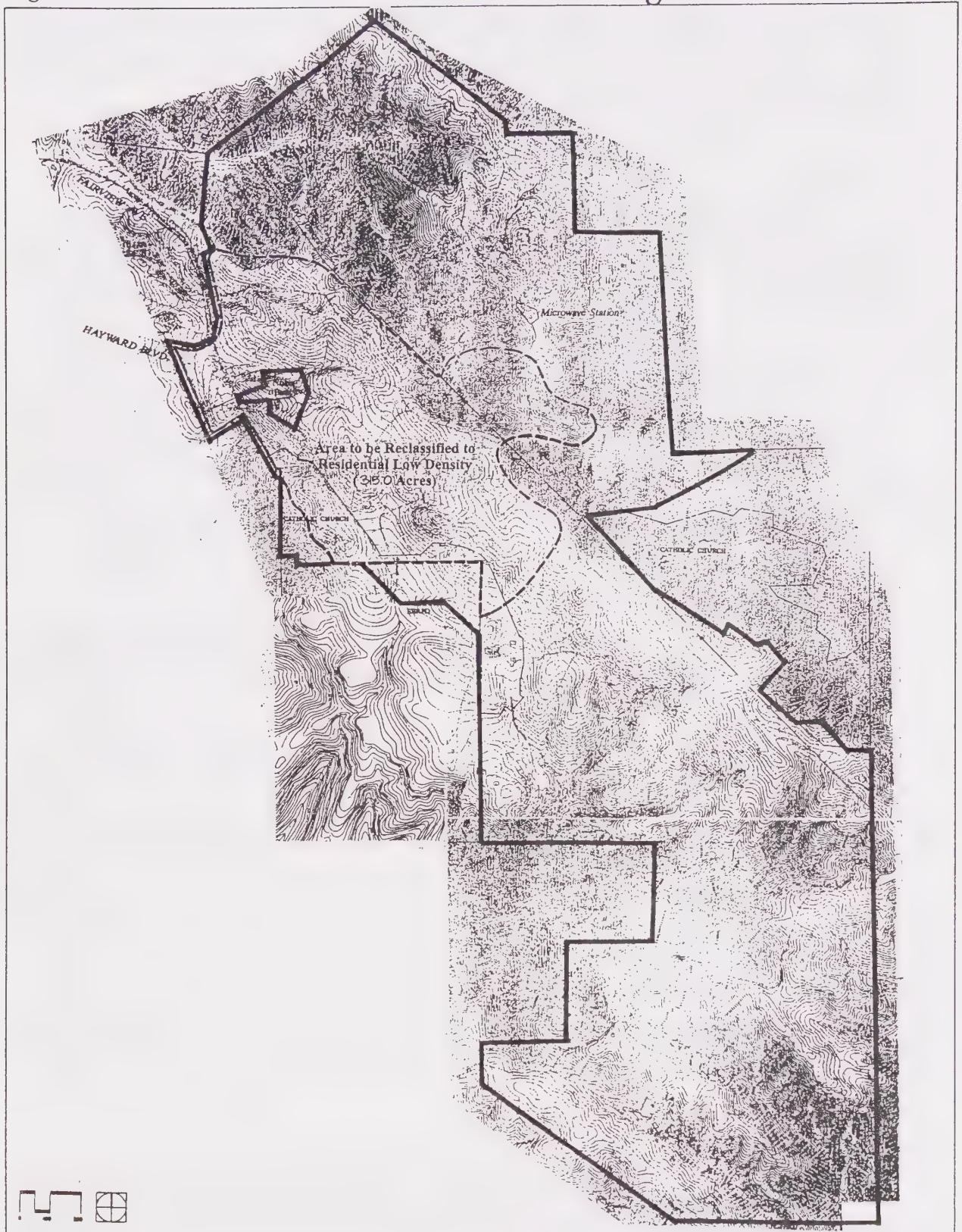
- (a) Amendment of the *Growth Management Element* and/or General Policies Plan Map to change the land use designation of the area within the *Urban Limit Line* (315 acres) from *Residential, Suburban Density (1.0 to 4.3 dwelling units per net acre)* to *Residential, Low Density (4.3 to 8.7 dwelling units per net acre)* (see Figure 11).
- (b) Amendment of the policies of the Walpert Ridge Specific Plan to:
- (1) Increase the housing allocation for the Hayward 1900 property from the currently allowed range (413 units to a maximum potential of 453 units¹) to 603 units, and to increase the housing allocation for the Roman Catholic Bishop of Oakland property from 32 to 47 units;
 - (2) Allow for lot sizes varying from 5,000 to over 10,000 square feet (rather than the current minimum lot size of 9,000 square feet);
 - (3) Allow for all padded lots instead of a mixture of padded, limited padded, and sloped lots;
 - (4) Allow for private streets and reduced street standards; and
 - (5) Amend the development standards and design guidelines.
- (NOTE: A complete set of proposed amendments to the Walpert Ridge Specific Plan is on file at the City of Hayward Department of Community and Economic Development.)
- (c) Rezoning of 585 acres from AG (Agricultural District) to PD (Planned Development District) (see Figure 12);
- (d) Approval of a Preliminary Development Plan (including City Council approval of extension of residential use to 0.1 mile beyond the 1.5-mile service area of Fire Station No. 5, as provided by the Walpert Ridge Specific Plan); and
- (e) Execution of a Development Agreement between the City of Hayward and the project applicant, Hayward 1900.

Hayward 1900 intends to process a precise development plan and a vesting tentative map for the project (consistent with the project analyzed in this SEIR), and would file applications for

¹The existing Walpert Ridge Specific Plan housing allocation (with density bonus) for the Hayward 1900 property is 413 units. The Specific Plan (page 22) states that "if Walpert Ridge property owners/developers enter into a mitigation agreement with HUSD (Hayward Unified School District), Hayward 1900's housing allocation will be 433-453 units."

Proposed General Plan Land Use Designation Amendment

Figure 11



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

[illegible]

Topographic map showing a large area outlined for rezoning. The map includes contour lines, roads, and various labels. A central area is labeled "Area to be Rezoned Planned Development (585.0 Acres)". Other labels include "Hayward Blvd", "Purview", "Microwave Station", "EIRPD (NOT A PART)", "COUNTRY CLUB", "TO HOLLAND", and "PACIFIC COAST HIGHWAY". A north arrow is in the bottom left corner.

SOURCE: Hayward 1900

SOURCE: Hayward 1900

these approvals following completion of items (a) through (e) above.¹ This SEIR is intended to cover these subsequent approvals. If substantial changes were proposed, the City of Hayward would need to determine whether this SEIR adequately addresses the potential environmental impacts of the project as modified, or whether additional environmental review must be conducted.

2. Other Approvals

In addition to the City of Hayward approvals listed above, the project would be subject to the jurisdiction of the following agencies and would require the following approvals:²

- (a) U.S. Army Corps of Engineers - A Section 404(b)(1) permit under the federal Clean Water Act (33 U.S.C. section 1344) would be required due to the project's impact on jurisdictional waters of the United States.
- (b) U.S. Fish and Wildlife Service - As part of the Section 404(b)(1) permit process (see (a) above), under the federal Endangered Species Act (15 U.S.C. section 1531 et seq.), the U.S. Army Corps of Engineers is required to consult with the U.S. Fish and Wildlife Service if the project may jeopardize the continued existence of a threatened or endangered species. The U.S. Fish and Wildlife Service may suggest conditions to be imposed on the Section 404(b)(1) permit.
- (c) California Department of Fish and Game - In connection with the project's wetland impacts, a Streambed Alteration Permit under Section 1603 of the California Fish & Game Code would be required. With respect to the project's impact on Alameda Whipsnake habitat, a Section 2081 Permit under the Fish and Game Code may be required, depending on the outcome of a current court and legislature review of the Department's authority to issue these permits.
- (d) Regional Water Quality Control Board - In connection with the Section 404(b)(1) permit process discussed above (see (a)), the applicant would be required to obtain certification of compliance with state effluent limitations and water quality standards (Section 401 of the Clean Water Act (33 U.S.C. section 1341)). In addition, the applicant would be required to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements pursuant to Section 402 of the Clean Water Act.
- (e) Alameda County Flood Control District - The applicant would be required to obtain review and approval of storm drainage plans and possible acceptance of dedication of detention basins.

¹Ibid.

²Wider, June 16, 1997.

- (f) East Bay Regional Park District - The applicant would be required to obtain approval of the proposed land transaction.
- (g) Hayward Area Recreation and Park District - The applicant would be required to obtain approval of the proposed park dedication.
- (h) Hayward Unified School District/Castro Valley Unified School District - The applicant would be required to obtain approval of a school district boundary adjustment to include the project site solely within the boundary of the Hayward Unified School District.
- (i) Hayward Unified School District - If the development agreement or conditions of approval require that an up-front school be constructed, the applicant would be required to obtain approval of the proposed school site dedication and school construction.
- (j) Pacific Gas & Electric Company (and other utilities) - The applicant would be required to obtain will-serve letters and approvals of engineering plans and utility access.

IV. SETTING, IMPACTS, AND MITIGATIONS

A. LAND USE AND OPEN SPACE

This SEIR section addresses the various land use issues raised by the proposed project, including the loss of open space; implications of converting portions of the site to residential, golf course, and school use; the compatibility of the proposed project land use changes with nearby existing and planned residential and open space uses; and the implications of the associated requests to amend the City of Hayward General Plan and Walpert Ridge Specific Plan.

Project consistency with adopted local and regional land use plans, including the Hayward General Plan and the Walpert Ridge Specific Plan, is also discussed in section V of this SEIR (Consistency with Adopted Plans and Policies) of this SEIR.

1. SETTING

a. Existing Onsite Land Uses

Figure 4 in section III (Project Description) illustrates existing onsite land use characteristics, and Figure 5 in section III shows existing onsite topography and parcelization characteristics.

(1) Natural Features. As shown on the figures, the site is defined by a major northwest-southeast trending ridge, with several narrow secondary ridges branching off of the main ridge. The slopes surrounding the ridge areas are covered with oak woodland and intervening pockets of coastal scrub (primarily coyote brush and sagebrush).

(2) Manmade Features. Figure 13 indicates the location of major manmade features on the project site. As shown on the figure, onsite urban development consists of the following uses (see Figure 5 in section III):

- a 75-foot-wide PG&E electrical transmission tower line and easement that extends through the central portion of the 1,558-acre Hayward 1900 property;
- one currently unoccupied housing unit and associated ranch structures in the southeastern portion of the 57-acre Roman Catholic Bishop of Oakland property; the gravel service road described above also provides access to this housing unit; and
- an easement for a Ridge Loop Trail connection to EBRPD's Garin Park, which extends from Hayward Boulevard/Fairview Avenue south through the site along an existing fire road to Garin Regional Park.

III. PROJECT DESCRIPTION

III. PROJECT DESCRIPTION

This chapter describes the proposed actions or "project" addressed by this SEIR. The project description is based on information contained in the 1991 EIR, the Walpert Ridge Specific Plan, and materials submitted to the City by the project applicant.

As stipulated by the California Environmental Quality Act (CEQA) Guidelines, the project description that follows has been detailed to the extent needed for adequate review and evaluation of environmental impacts. The description includes (a) the location, boundaries, and local setting of the project site; (b) a historical overview of the site and project; (c) a statement of the basic project objectives sought by the applicant; (d) the project's physical and technical characteristics (i.e., proposed land use and circulation layout, public facilities provisions, and other pertinent design aspects); (e) the anticipated project phasing and construction schedule; and (f) the various permits and jurisdictional approvals required to allow construction of the project.

A. PROJECT SETTING

1. Regional Location

As illustrated on Figure 2, the project site is located in the eastern portion of the City of Hayward, in western Alameda County. The unincorporated communities of San Lorenzo and Castro Valley, and the cities of San Leandro and Oakland, are located to the north, Union City and Fremont to the south, San Francisco Bay to the west, and unincorporated Alameda County and the City of Pleasanton to the east. Interstate 880 (I-880) provides regional access to the site via Jackson Street.

2. Local Setting

As illustrated on Figures 3 and 4, the proposed project site is located southeast of Fairview Avenue/Hayward Boulevard in eastern Hayward on Walpert Ridge, a northwest trending ridge that extends from central Hayward to Union City and Fremont and reaches over 1,500 feet in elevation.¹ The site is located approximately six miles east of I-880 via State Route 92, Mission Boulevard, and Carlos Bee Boulevard/Hayward Boulevard; and south of I-580 via East Castro Valley Boulevard, Castro Valley Boulevard, or Foothill Boulevard. The Hayward BART station, located in downtown Hayward, lies approximately six miles west of the site via "B"

¹Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan EIR (Draft, February 22, 1991), page 1.

Project Location Map



Figure 3

Local Setting Map

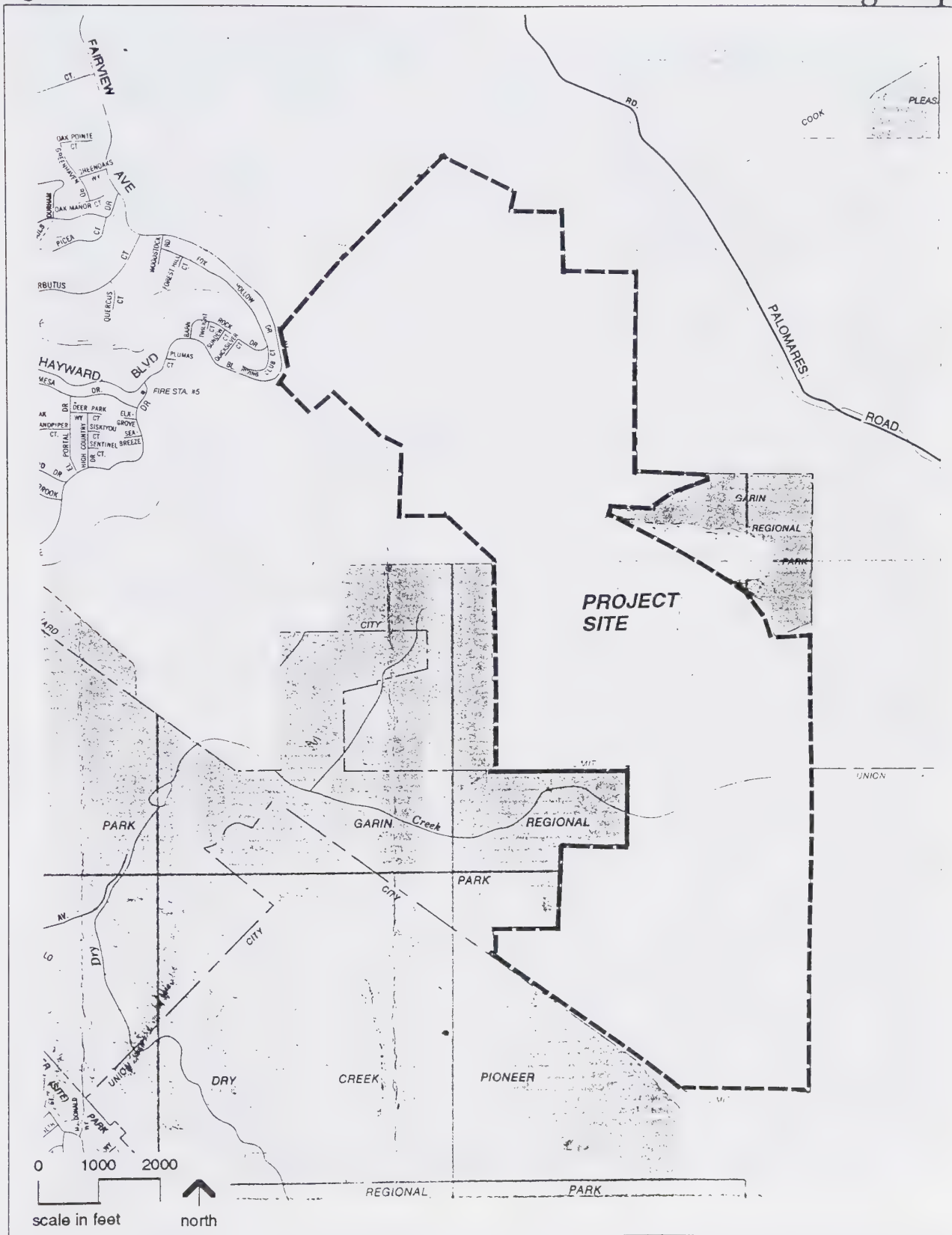


Figure 4

Local Setting Aerial Photograph



Street, Mission Boulevard, and Carlos Bee Boulevard/Hayward Boulevard. The Castro Valley BART station (scheduled to open in 1997) lies approximately three miles north of the site via Fairview Avenue, Maud Street, Kelly Street, Center Street, Castro Valley Boulevard, and Norbridge Avenue.

The project site is bounded by open space to the north, the western ridgetop of Palomares Canyon to the east, Dry Creek Pioneer Regional Park and other open space to the south, and Garin Regional Park, other open space, and a 153-unit single-family residential development (the Prominence subdivision, located immediately across Hayward Boulevard) to the west. One currently unoccupied housing unit (the former Meincke residence) is located on East Bay Regional Park District (EBRPD) property immediately west of the 20-acre portion of the project site owned by EBRPD. Five Canyons, a 960-unit residential area, is located north of the project site between Interstate 580, Fairview Avenue, and Palomares Road in Alameda County.¹

Figure 5 shows property ownership on the project site and in the immediately surrounding area. The following land uses are located on properties that are surrounded by the project site, but are not included in the project site (see Figures 4 and 5):

- A single-family residential structure and associated ranch buildings on the Carden property adjoining the northwestern portion of the project site;
- A regional communications tower owned by Pacific Telephone and Telegraph (PT&T) on a one-acre site (along with a mobile access easement) adjoining the northeastern portion of the project site;
- A City of Hayward Police Department communications tower on a 2,500-square-foot parcel (along with a mobile access easement) abutting the PT&T site; and
- A City of Hayward water tank adjoining the northwestern portion of the project site.

3. General Site Characteristics

As shown on Figures 2 and 3, the approximately 1,635-acre, irregularly-shaped project site is located on rolling terrain on Walpert Ridge. The site encompasses 1,558 acres owned by Hayward 1900 (the project applicant), approximately 57 acres owned by the Roman Catholic Bishop of Oakland, and approximately 20 acres owned by the East Bay Regional Park District (see Figure 5). Slopes on the site range from relatively flat (0 to 10 percent slope) to steep (over 30 percent slope).

(a) Physical Characteristics. The project site is defined by a major northwest-southeast trending ridge rising from approximately 1,300 feet near Fairview Avenue to over 1,500 feet at the eastern edge of the property. Several narrow secondary ridges branch off of the main

¹Ibid.

Topographic and Property Ownership Map



ridge. The ridgetop areas are characterized by undulating slopes, annual grasses, and scattered rock outcroppings. These grassland areas are currently used for cattle-grazing.

The slopes surrounding the ridge areas are characterized by oak woodland vegetation with intervening pockets of coastal scrub vegetation (primarily coyote brush and sagebrush). These slopes are relatively steep, with grades typically exceeding 25 percent.¹

The western half of the property is located in the upper reaches of the Dry Creek watershed, which drains into Garin Regional Park west of the project site. The eastern half of the property drains into the Palomares Creek watershed. A small area at the northern end of the property drains into Ward Creek.²

(b) Existing Onsite Development. As shown on Figure 5, the project site is made up of property owned by Hayward 1900, the East Bay Regional Park District, and the Roman Catholic Bishop of Oakland. Existing development on these properties consists of the following (see Figures 4 and 5):

- **The Hayward 1900 property** contains dirt or gravel service roads, barbed wire fencing, and several cattle stock ponds. In addition, a 75-foot-wide PG&E electrical transmission line easement extends in a northwest-southeast direction through the central portion of the property.
- **The Roman Catholic Bishop of Oakland property** to the west of the Hayward 1900 property also contains one currently unoccupied housing unit and associated ranch structures in the southeastern portion of the property.

In addition, portions of the project site are currently used and have historically been used for cattle grazing.³

B. SITE HISTORY

In 1980, the Hayward City Council adopted a specific area plan for Walpert Ridge. This plan was replaced on September 24, 1991, when the City Council adopted the Walpert Ridge Specific Area Plan and certified the accompanying Final EIR. The Specific Area Plan, which covered the current project site and adjacent properties, contained policies that allowed for development of 500 to 700 housing units within a defined ridgetop area located within the 1.5-mile service area radius of Fire Station No. 5 while requiring preservation of the larger remaining area as open space. Policies for the residential community defined lot size criteria,

¹Ibid.

²Ibid.

³Lise Hinman, YCS Investments (project applicant); personal communication, July 1997.

a potential density bonus, and the *Urban Limit Line* that would govern the location of housing. The Specific Area Plan also described development prerequisites for (1) dedication of land for open space, an elementary school, a neighborhood park, and the Bay Area Ridge Trail; (2) off-site traffic improvements; and (3) formation of benefit and assessment districts.¹

On July 25, 1995, the Hayward City Council adopted the Walpert Ridge Specific Plan, which superseded the Walpert Ridge Specific Area Plan. The Specific Plan, prepared in conformance with State Government Code section 65451, addressed outstanding issues pertaining to residential development on Walpert Ridge, such as (1) the allocation of housing units among property owners; (2) conformance with the City's Hillside Design and Urban/Wildland Interface Guidelines; (3) site design, circulation, infrastructure, and fire management standards tailored to the development area; and (4) the locations of park and school sites.²

On July 2, 1996, the Hayward City Council authorized a Memorandum of Understanding (MOU) between the City and Hayward 1900, Inc., the owner of 1,580 acres on Walpert Ridge, to establish a process for involving interested community representatives in the early stages of formulating a development application for the Hayward 1900 property.³ After meeting regularly over a five-month period (from August 1996 to January 1997), the Ad Hoc Committee on Hayward 1900 issued a report to the City Council containing recommendations for a preferred development alternative on the Hayward 1900 property. The committee reached consensus on key issues regarding development of the site, including that the project should consist of a private, gated residential community with an integrated golf course; that the applicant should provide for "upfront" school construction and dedicate land for park, regional trail, and open space use; that padded lots should be permitted; that streets and utilities should be constructed to appropriate City standards; that the applicant should fund construction of an onsite emergency medical service facility as an alternative to a new fire station; and that "realistic" traffic mitigations should be identified through a supplemental EIR. The committee did not reach full consensus on the number of housing units and range of unit types to be developed on the site, or extension of the *Urban Limit Line* to accommodate the project.⁴ The City Council accepted the report on February 4, 1997.

In formulating the development plan for the project site, Hayward 1900 evaluated environmental opportunities and constraints on the site, existing City policies pertaining to the

¹City of Hayward, Walpert Ridge Specific Plan, July 25, 1995, page 4.

²Ibid.

³City of Hayward Agenda Report to Mayor and City Council from Director of Community and Economic Development, re. "Report of the Ad Hoc Committee on Hayward 1900, January 21, 1997.

⁴Ad Hoc Committee on Hayward 1900, Report to the City Council, Recommendations on a Preferred Development Alternative for the Hayward 1900 Property, January 14, 1997.

site, and the economic feasibility of development on the site. Hayward 1900 also consulted with the East Bay Regional Park District, the Hayward Unified School District, the Hayward Area Recreation and Park District, and City of Hayward staff.¹

On March 23, 1997, Hayward 1900, the project applicant, submitted its presently pending development application, which was subsequently revised and/or supplemented in April and May of 1997 and on June 20, 1997. This application is the subject of this SEIR.

C. BASIC PROJECT OBJECTIVES

The basic objectives of the project, as stated by the project applicant,² are as follows:

1. The project's primary objective is the development of a high quality, gated residential/golf course community.
2. To create a sense of place, a destination, through the inclusion of signature landscaping and architectural elements combined with country club amenities providing significant recreational opportunities, including a golf clubhouse, tennis and swim facilities.
3. To provide a variety of housing types and lot sizes that will appeal to a range of potential home buyers and which will add to the overall housing mix in the City.
4. To increase the supply of upscale housing in Hayward, which currently suffers a deficiency in this type of housing. This project will help the City to meet its goal of increasing its tax base and providing an incentive for existing retail businesses to remain in Hayward and for new businesses to locate in Hayward.
5. To provide an 18-hole championship golf course that will increase the likelihood of the project's long-term success and will attract significant revenue to the City.
6. To provide a new school for the City that will help to alleviate overcrowding in Hayward schools and will improve the quality of public educational opportunities available in Hayward.

¹Letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Dyana Anderly, AICP, City of Hayward, re. "Blue Rock Country Club--Comments on ADEIR," July 3, 1997, page 2.

²Attachment (entitled "Blue Rock Country Club Project Objectives") to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Horn, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997.

7. To permanently preserve the maximum amount of open space on Walpert Ridge, thereby minimizing impacts on sensitive biological resources and wildlife and other habitat, preserving the visual prominence of the Ridge and providing additional parkland, including acreage of active play fields.
8. To provide critical trail links to Garin Regional Park and the East Bay Ridge Trail, thereby fulfilling the goal of creating open space opportunities for all City and regional residents and visitors to the Bay Area.
9. To create a fiscally sound and financially feasible project, thereby enhancing the successful construction and continuing viability of the project which in turn will enable the provision of anticipated services, infrastructure and community wide amenities.

D. PROPOSED PROJECT PHYSICAL CHARACTERISTICS

1. Overall Development Concept

The project applicant, Hayward 1900, proposes to develop a private, gated, single-family residential community with an 18-hole golf course, a golf clubhouse, a tennis/swim facility, and a joint elementary school/park site. The project would be developed on an approximately 1,635-acre project site that includes Hayward 1900's 1,558-acre property, 57 acres of adjacent property owned by the Roman Catholic Bishop of Oakland, and 20 acres of adjacent property owned by the East Bay Regional Park District.

Figure 6 illustrates the preliminary development plan proposed by the applicant. As shown on the figure, the northern portion of the project site would be developed as a 650-unit single-family residential area, and the northern and middle portions would contain an 18-hole golf course. The first nine holes of the golf course would extend generally around the perimeter of the residential area. The remaining northeastern- and southern-most portions of the site would be preserved as open space.

2. Planning and Design Objectives

The Blue Rock Country Club project has been designed as a "comprehensive planned, recreation-oriented, country club community."¹ The stated intent of the associated site planning and landscape guidelines is to "establish a common visual landscape theme by unifying the various elements which make up the community." The design concept includes use of consistent theme walls, fences, monuments, signage, drought-tolerant and indigenous

¹Bryan Grunwald Associates and Fee Munson Ebert, Preliminary Blue Rock Country Club Design Guidelines, May 23, 1997.

This is a detailed topographic map of a coastal area, likely a military installation or a fortified region. The map shows a large, irregularly shaped landmass with a complex network of roads, paths, and buildings. The coastline is marked by a thick, dashed line. The interior of the landmass is filled with contour lines indicating elevation. A large, central area is labeled 'CAMP' and contains numerous small, rectangular structures. To the left, a body of water is labeled 'SEA'. The map is oriented with North at the top. A scale bar and a north arrow are located in the bottom left corner.

This is a detailed topographic map of a coastal area, likely a military installation or a fortified region. The map shows a large body of water on the left, with a curved shoreline. A prominent road or railway line runs along the coast, marked with a thick dashed line. The land area is densely packed with buildings, roads, and other structures. Contour lines indicate the terrain's elevation. A compass rose is located in the bottom left corner, and a scale bar is positioned below it.



plant materials, neighborhood parks, parkways, and open space areas. The design theme is to create "a natural setting with the historic flavor of Spanish California."

3. Land Use Layout

Table 2 shows the proposed land uses by gross acreage. As indicated in the table, the project would contain approximately 145 acres of residential uses, 331 acres of golf course and associated uses, a 6.3-acre elementary school with an adjoining five-acre public neighborhood park, 6.5 acres of private village mini-parks, and a 5.5-acre swim and tennis club. Rights-of-way for major roads and other utilities would occupy 32 acres, and the remaining approximately 1,100 acres would be devoted to open space. Of this 1,100-acre total, 40.7 acres would be maintained by the local homeowners' association, and 1,061.0 acres would be dedicated to the East Bay Regional Park District or other public agency, deeded to the homeowners' association, or retained by Hayward 1900 as open space.

(a) Residential Development. As shown in Figure 6, the proposed residential area has been divided into seven neighborhood clusters (A through G). Table 3 indicates the proposed number of housing units by lot size in each neighborhood cluster. As shown in the table, proposed lot sizes range from 5,000 to 10,000 square feet or more. The 650-unit total would consist of 47 units (seven percent) on 5,000-square-foot lots, 271 units (42 percent) on 5,500-square-foot lots, 203 units (31 percent) on 6,000-square-foot lots, 19 units (three percent) on 7,000-square-foot lots, 76 units (12 percent) on 7,500-square-foot lots, 16 units (two percent) on 8,000-square-foot lots, and 18 units (three percent) on lots of 10,000 square feet or more.

As illustrated in Figure 6, neighborhood clusters A through F (616 total units) would extend south from Fairview Avenue/Hayward Boulevard along a series of rolling hills on the west side of the PG&E easement. Cluster G, which would contain 34 larger-size (8,000- to over 10,000-square-foot) lots, would be located east of the PG&E easement in a steeper portion of the site.

(b) Golf Course Development. The proposed project includes an 18-hole, championship-length¹ golf course and associated facilities, including a full-size practice range, a clubhouse, and a maintenance center. The applicant states that "the Walpert Ridge site has the potential to accommodate one of the most dramatic and challenging golf courses in the Bay Area,"²

¹A "championship" or regulation golf course is typically par 70 or greater and 6,000 yards or greater in length from the men's or middle tees. Based on the applicant's preliminary routing plan, the proposed golf course would measure approximately 7,000 yards from the championship tees, with a par of 72. Other tee locations (blue, white, gold, and red) would measure 5,600 to 6,600 yards, with a par of 72. (Letter from Daniel Bucko, Golf Course Architect/Land Planner, Bryan Grunwald Associates, to Joanna Callenbach, YCS Investments, re. "Walpert Ridge Golf Course Summary," May 23, 1997; and re. "Amendments to the Walpert Ridge Golf Course Summary dated May 23, 1997," June 19, 1997.)

²Ibid.

Table 2
PROPOSED LAND USES BY GROSS ACREAGE

<u>Proposed Land Use</u>	<u>Gross Acres (rounded)</u>
Single-Family Residential	145.0
Golf Course, Clubhouse, Maintenance Area, Practice Range*	333.0
Elementary School	6.3
Neighborhood Park (public)	5.0
Private Neighborhood Parks	6.5
Swim and Tennis Club	5.5
Major Road Rights-of-Way and Utilities**	32.0
Homeowners' Association-Maintained Open Space***	40.7
Other Open Space Areas****	1,061.0
TOTAL:	1,635.0*****

* Includes some unirrigated natural open space.

** Includes detention basins and potential future telecom sites.

*** Includes some acreage within the planned development area that may ultimately be dedicated to the East Bay Regional Park District or other public agency.

**** To be dedicated to the East Bay Regional Park District or other public agency.

***** This total includes property owned by Hayward 1900 (approximately 1,558 acres), the Roman Catholic Bishop (approximately 57 acres), and the East Bay Regional Park District (approximately 20 acres). The development plan currently shows a small area of the golf course (approximately two acres) on property owned by the Roman Catholic Bishop located to the east of the Hayward 1900 property. This area is included in the 1,635 acres comprising the site, but will likely be modified as the golf course final design is developed.

SOURCE: Hayward 1900

Table 3
NUMBER OF HOUSING UNITS BY NEIGHBORHOOD CLUSTER AND LOT SIZE

<u>Neighborhood*</u> <u>Cluster</u>	<u>No. of Units by Minimum Lot Size (square feet)**</u>							<u>Total No.</u> <u>of Units</u>
	<u>5,000</u>	<u>5,500</u>	<u>6,000</u>	<u>7,000</u>	<u>7,500</u>	<u>8,000</u>	<u>10,000+</u>	
A	--	168	--	--	--	--	--	168
B	47	--	23	5	21	--	--	96
C	--	44	24	5	21	--	--	94
D	--	37	38	5	10	--	--	90
E	--	22	61	--	6	--	--	89
F	--	--	57	4	18	--	--	79
G	--	--	--	--	--	16	18	34
TOTAL:	47	271	203	19	76	16	18	650
Percent of Total	7	42	31	3	12	2	3	100

* See Figure 6 for neighborhood cluster locations.

** In certain cases, according to the project applicant, "minimum" lot size consists of useable pad area and does not include slopes at the side or rear of lots.

SOURCE: Hayward 1900

based on the exposed ridgetop location, wide-spanning views, and varied terrain. The plan proposes a "high quality" golf course of "championship length" over the northern and central portions of the project site. The golf course holes would be routed through the varying topography of the site, with a number of uphill and downhill holes. The holes would run predominantly parallel to the northwest trending ridge to minimize uphill and downhill climbs.

As shown on Figure 6, the first nine holes of the golf course would extend around the perimeter of Neighborhoods B through F, and holes 10 through 18 would be located immediately south of Neighborhoods C and E in the middle portion of the project site. The clubhouse, practice range, and an approximately 200-space parking lot would be located immediately south of Neighborhood C, and the 5,000-square-foot golf course maintenance center would be located southwest of Neighborhood E. The 32,400-square-foot clubhouse would include club facilities (e.g., meeting rooms, convenience retail), a restaurant and lounge areas, and a swimming pool. Figure 7 illustrates the general layout of the clubhouse area.

The golf course would contain three lakes (see Figure 6): 2.4-acre Lake A, located east of holes 10 and 11; 1.65-acre Lake B, located between holes 11 and 12; and 0.38-acre Lake C, located immediately east of the golf course parking lot, between holes 1 and 2. Lake A would be used for irrigation storage, and the other two lakes would serve aesthetic and strategic purposes on the golf course and have some limited run-off retention potential. The storage capacities of Lakes A, B, and C would be 24.0 acre-feet, 9.4 acre-feet, and 2.1 acre-feet, respectively.¹

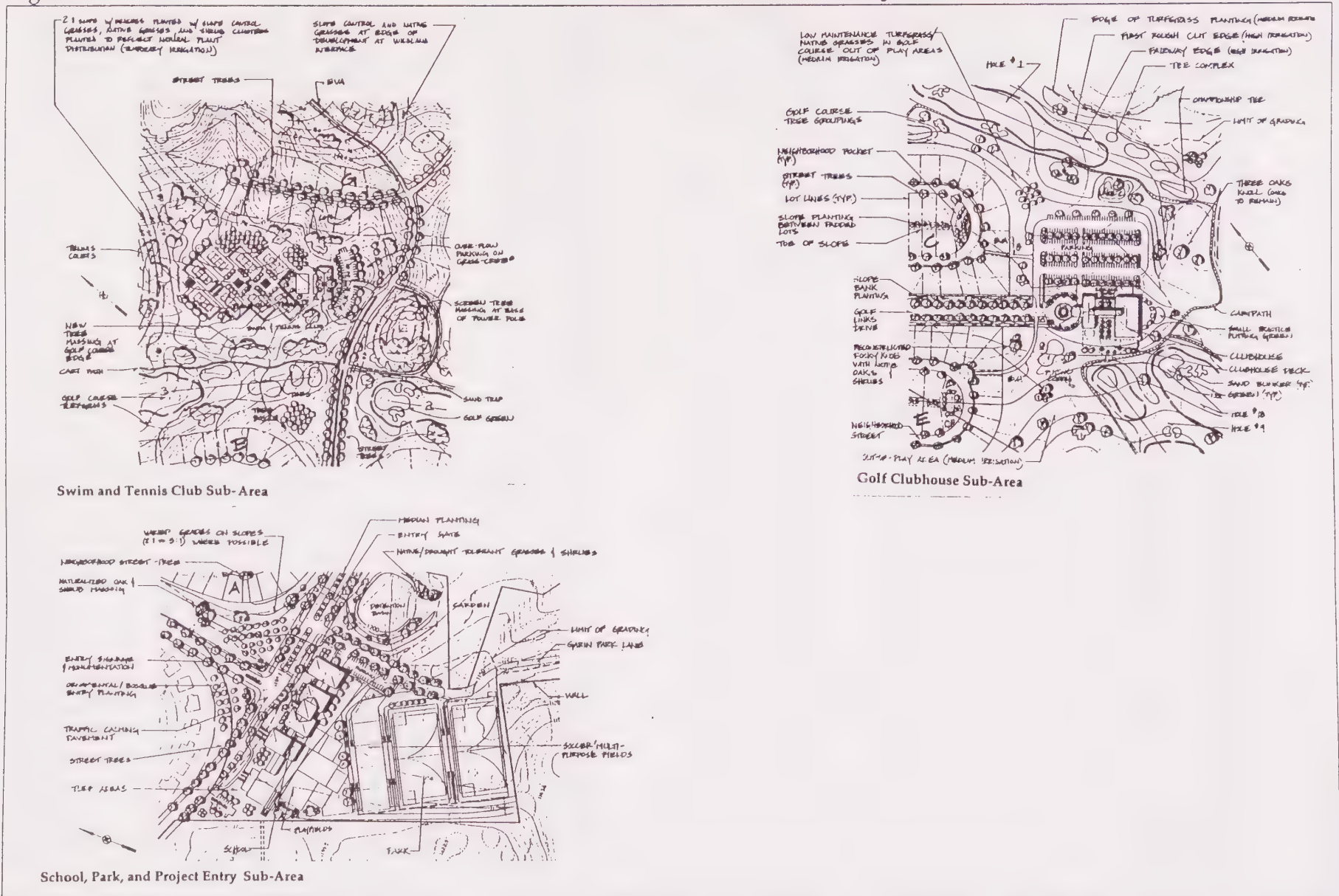
(c) Swim and Tennis Club. The project would include a swim and tennis club, to be located in the eastern portion of the site on the west side of residential neighborhood G. Figure 7 illustrates the general layout of the swim and tennis club area. The 6,750-square-foot complex would contain club facilities, convenience retail, five to eight tennis courts, a swimming pool and hot tub, and an approximately 70-space parking lot.

(d) Elementary School/Park Site. The current project plans include a 6.3-acre school site and an adjoining five-acre public park site located on the south side of Fairview Avenue/Hayward Boulevard in the northwest corner of the proposed residential development area, immediately outside the project entry gate (see Figure 7). The applicant is currently negotiating with the Hayward Unified School District (HUSD) to determine whether the applicant would dedicate the school site to the HUSD, pay school impact fees to the HUSD, or provide other school mitigation acceptable to the HUSD. If the elementary school is constructed on the site, the project, in the first phase of project development, would include construction of an approximately 54,794-square-foot elementary school, consisting of (1) classrooms for 350 students, and (2) "core" facilities (e.g., library, multipurpose room,

¹Letter from Daniel Bucko, Golf Course Architect/Land Planner, Bryan Grunwald Associates, to Joanna Callenbach, YCS Investments, re. "Walpert Ridge Golf Course Summary," May 23, 1997; and re. "Amendments to the Walpert Ridge Golf Course Summary dated May 23, 1997," June 19, 1997.

Proposed Site Plans for Golf Clubhouse, School/Park Facility and Swim/Tennis Club Areas

Figure 7



restrooms, offices) of adequate size to accommodate the initial 350-student school enrollment. The school, which would serve students from the proposed project, and would be "modular," allowing the Hayward Unified School District to construct additional facilities on the site over time.¹

The joint school/park facility would include play courts and ball fields, including two soccer fields (see Figure 7). The park site would be dedicated to the City of Hayward and then placed under a Master Lease Agreement with the Hayward Area Recreation and Park District (HARD) to allow for development and maintenance of the park by HARD.

The proposed 44-space parking lot of the joint school/park facility would also serve as a trail staging area for access to Garin Regional Park, which adjoins the southwest boundary of the project site. Garin Park Lane would serve as the trail link to the regional park (see further discussion under "i. Vehicular and Pedestrian Circulation" below).

(e) Private Village Mini-Parks. The proposed residential area would contain nine private village mini-parks, ranging in size from approximately one-half to one acre (see Figure 6). The local homeowners' association would be responsible for maintaining these parks.

(f) Open Space. Figure 8 illustrates the extent of the area proposed to remain as open space. As shown on the figure, the northeastern and southern portions of the project site would contain open space that the applicant intends to dedicate to the East Bay Regional Park District or other public agency.² The applicant intends to allow the East Bay Regional Park District to provide a continuous Bay Area Ridge Trail link through this portion of the site to Garin Regional Park.³ Generally, other open space that immediately surrounds the proposed residential areas and is not part of the proposed golf course would be maintained by the local homeowners' association (see Figure 8). A final delineation of open space areas would be made at the final design stage.

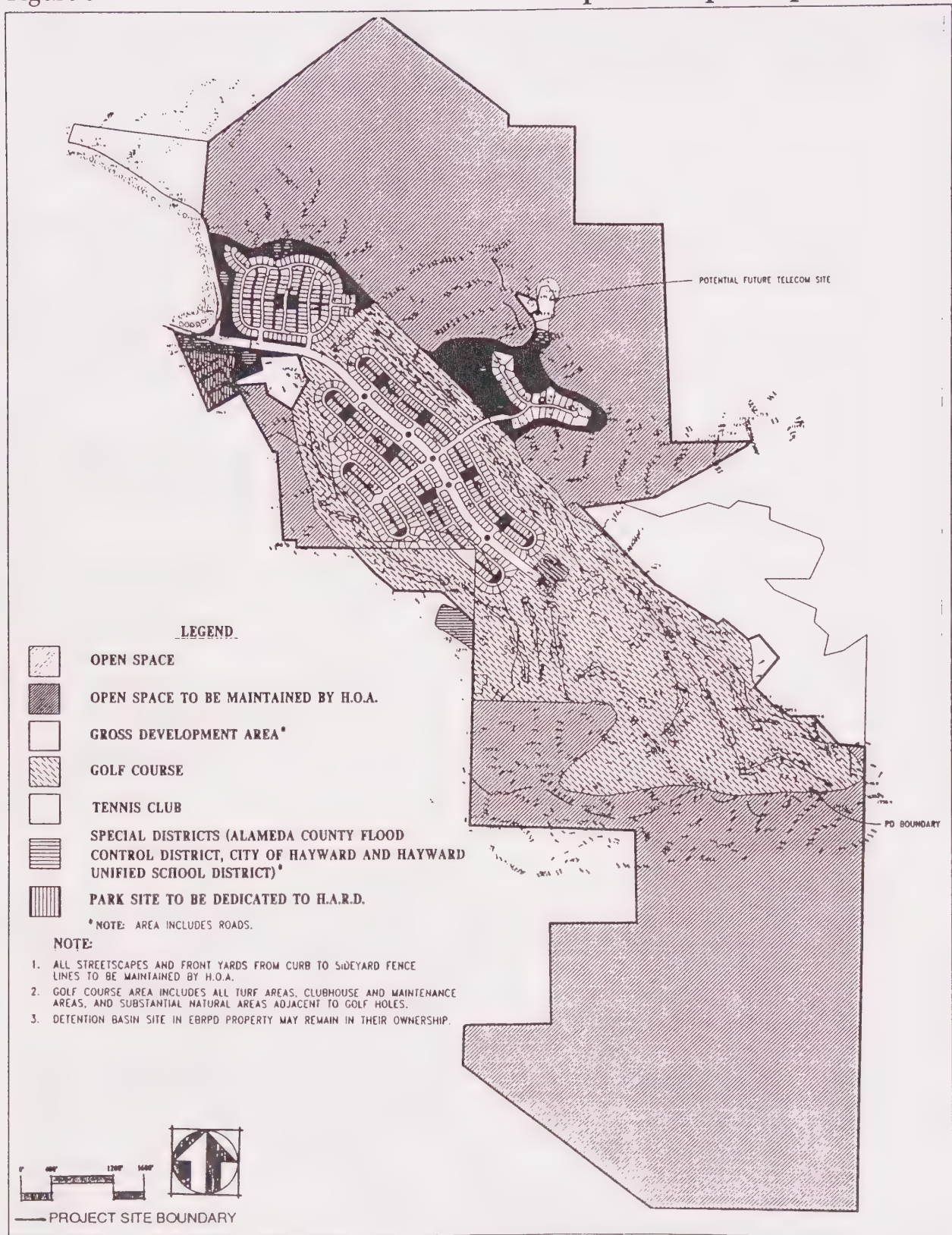
¹"Hayward 1900 Property, Catholic Church Property, and A Portion of the East Bay Regional Park Property, Walpert Ridge, Revised Development Permit Application, Blue Rock Country Club Project, City of Hayward, Alameda County" (attachment to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Hom, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997).

²Letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant), to Natalie Macris, Wagstaff and Associates, re. "Blue Rock Country Club Project--Responses to Questions Regarding Project Description," June 16, 1997.

³"Hayward 1900 Property, Catholic Church Property, and A Portion of the East Bay Regional Park Property, Walpert Ridge, Revised Development Permit Application, Blue Rock Country Club Project, City of Hayward, Alameda County" (attachment to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Hom, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997).

Figure 8

Proposed Open Space Areas



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

(g) Other Facilities. The project would contain the following additional facilities (see Figures 6 and 8):

- Two water tanks, located immediately northwest of Neighborhood G (see Figure 6). The two tanks would have a total storage capacity of approximately 2.3 million gallons,¹ and would provide water for fire, emergency, and operational purposes (except for golf course irrigation, which will be provided by onsite irrigation storage lakes). The applicant intends to dedicate the water tank site to the City of Hayward² (see Figure 8).
- Potential future telecom sites, located north of the water tank area in the vicinity of the existing PT&T and City of Hayward Police Department communications towers (see Figures 5 and 6). This area may be used for siting telecommunications facilities that may be needed or desired by the property owner, the homeowners' association, or third parties. This area (exact acreage to be determined) would be excluded from the open space areas to be dedicated to the East Bay Regional Park District.³
- Relocated pipe and access road for an existing water tank, located north of Neighborhood A (see Figure 6). The water tank site has already been dedicated to the City of Hayward (see Figure 8). The pipe and road access to the tank, which currently extend off Fairview Avenue, would be relocated through Neighborhood B via the proposed road network.⁴
- An 0.5-acre detention basin (with eight acre-feet of storage capacity) on the west side of Neighborhood A. While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see section IV.F, Drainage and Water Quality). Alternatively, the detention basin may be owned and maintained by the homeowners' association.⁵
- A 0.7-acre detention basin (with 12 acre-feet of storage capacity) located immediately south of the proposed entry gate (see Figure 6). While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see

¹Carlson, Barbee & Gibson, Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads, and Grading, for Hayward 1900 Property, Hayward, California, revised June 11, 1997, page 5.

²Wider, June 16, 1997.

³Wider, June 16, 1997.

⁴Wider, June 16, 1997.

⁵Wider, June 16, 1997.

section IV.F, Drainage and Water Quality). Alternatively, the detention basin may be owned and maintained by the homeowners' association.¹

- A 2.0-acre detention basin (with 30 acre-feet of storage capacity) located immediately north of the golf course maintenance center (see Figure 6). While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see section IV.F, Drainage and Water Quality). Alternatively, the detention basin may be owned and maintained by the homeowners' association.²
- A 0.6-acre detention basin (with 10 acre feet of storage capacity) located north of the proposed tennis/swim club (see Figure 6). While the applicant proposes that this basin be dedicated to and maintained by the Alameda County Flood Control District (see Figure 8), the district has indicated that it does not wish to accept this responsibility (see section IV.F, Drainage and Water Quality).³ Alternatively, the detention basin may be owned and maintained by the homeowners' association.⁴

4. Architectural and Landscape Design

The applicant-prepared statements of project architectural and landscape design features are summarized below, as submitted by the applicant. (The independent findings of this EIR with respect to the visual impacts of the project, and associated mitigation needs, are described later in section IV.B of this report.)

(a) Architectural Design. The applicant-proposed project Preliminary Design Guidelines state that project building design "will reflect a Mission, Spanish Colonial or Monterey style," and that "the golf clubhouse, tennis and swim club, school, common walls, bridges, and entry guard houses and gates will reinforce this architectural aesthetic." Encouraged architectural elements will include rustic cut or cast stone, textured (heavy dash) plaster surfaces, ornamental plaster walls, wooden balconies, window shutters, wrought iron construction, and shallow gable roofs with barreled terra cotta tile.

Building Color. The applicant-proposed Preliminary Guidelines (page 5) state that, in general, building walls will be "light umbria in color" (tan) "to complement the...surrounding landscape."

¹Wider, June 16, 1997.

²Wider, June 16, 1997.

³Preliminary Blue Rock Country Club Design Guidelines, prepared by Bryan Grunwald Associates and Fee Munson Ebert, May 23, 1997.

⁴Wider, June 16, 1997.

(b) Landscape Design. The project Preliminary Design Guidelines call for revegetation of all landscape areas after disturbance, including the golf course, streetscapes, neighborhood and community parks, entry landscape, residential front yard landscapes, and "interface" areas between the project development area and the undisturbed natural landscape.

Golf Course. The applicant-proposed Preliminary Guidelines state that the golf course will have a "natural oak woodland landscape that mimics the naturalized landscape of the Hayward hills."

Streets. Street landscapes will include ordered plantings of street trees to provide shade and structure to the roadways and neighborhoods. Some streetscapes will have a combination of quicker-growing street trees such as Sycamores and Raywood ash, alternated with slower-growing oaks.

Lot Lines and Neighborhood Parks. Areas adjacent to housing lot lines and within neighborhood parks will be more densely planted with shrubs and trees to provide privacy and to enclose the parks.

Rock Outcroppings. The Guidelines indicate that "where possible, rock outcrops disturbed during grading will be salvaged and placed in informal landscaped areas such as the golf course, larger landscaped zones, and visible slopes areas," and "oaks and other native species will be planted around the reconstructed rock outcrops."

5. Vehicular and Pedestrian Circulation

Figure 9 illustrates the proposed roadway and trail circulation plan for the project. The project would be served by a main entry road, extending from the project gate to the golf course clubhouse. Smaller neighborhood-serving roads would intersect the entry road and provide access to residential areas. All roadways within the project would be private, and would be maintained by the local homeowners' association.

(a) Roadway Specifications. Figure 10 shows typical roadway cross-sections proposed for the project. As shown in the figure, the project would contain the following general roadway classifications:

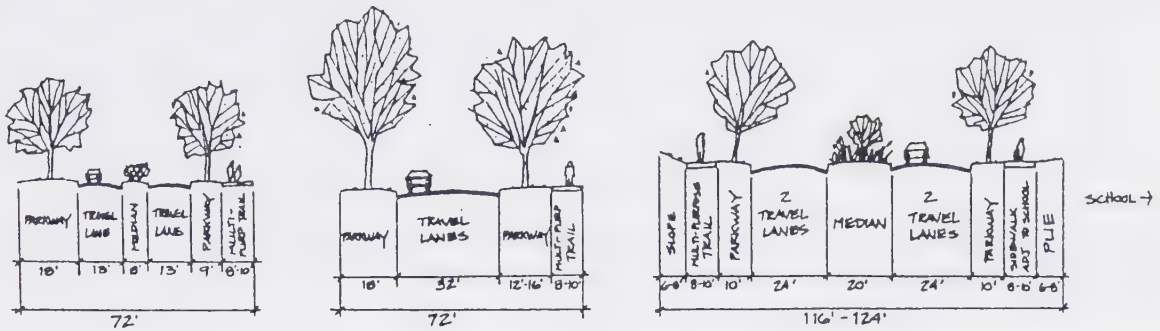
- **Hayward Boulevard/Fairview Avenue.** These road rights-of-way would be a total of 72 feet wide, including an 18-foot-wide landscaped parkway on one side and a parkway and multi-purpose trail (17 feet to 22 feet in total width) on the other side. Hayward Boulevard would contain one 13-foot-wide travel lane in each direction, separated by an eight-foot median. Fairview Avenue would contain a 32-foot-wide right-of-way for travel lanes.
- **Project Entry Road.** The project entry road would range from 116 to 124 feet in total width. From the project site boundary to the entry gate, the right-of-way would contain a 10-foot-wide landscaped parkway and an eight- to ten-foot-wide sidewalk or trail on either

Proposed Circulation Plan



Figure 10

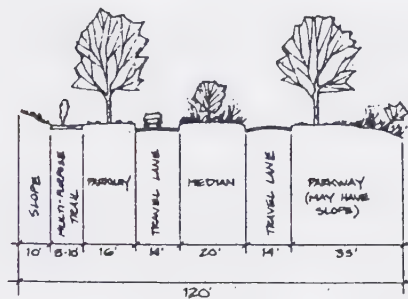
Proposed Roadway Cross-Sections



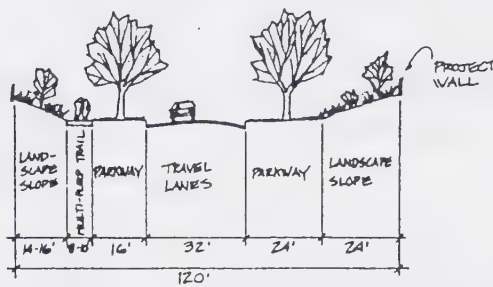
1 - Hayward Boulevard

2 - Fairview Avenue

3A - Entry Road:
Project Entry to Entry Gate

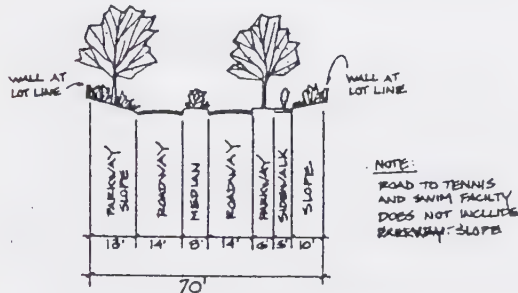


3B - Entry Road:
Entry Gate to Overpass

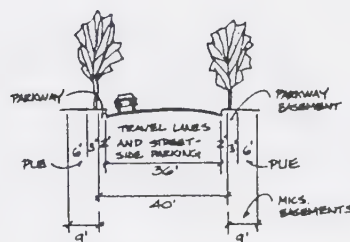


4 - Entry Road:
Overpass to Clubhouse

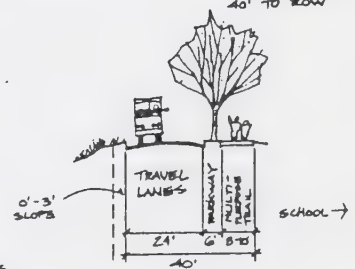
NOTE:
PERPENDICULAR
PARKWAYS MAY
OCCUR ON EITHER
SIDE OF TRAVEL
LANES ADDING
40' TO ROW



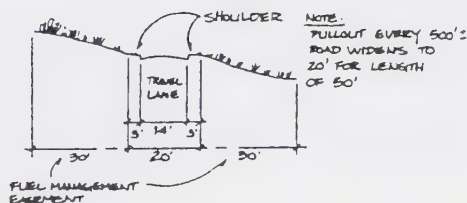
5 - Neighborhood Entry and
Road to Tennis and Swim Club



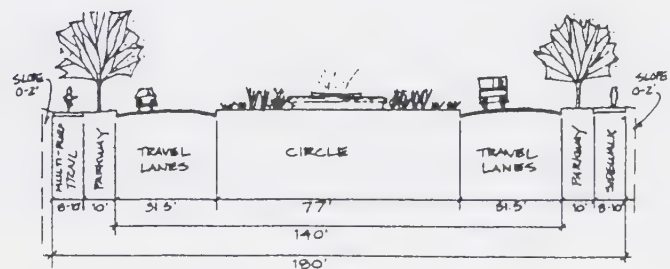
6 - Neighborhood Road



7 - Garin Park Lane By School



8 - Garin Park Land and
Emergency Vehicle Access



Typical Round-About (Traffic Circle)

NOTE: See Figure 9 for cross-section locations

side. Two travel lanes (24-feet-wide each) would extend in either direction, separated by a 20-foot-wide landscaped median. From the entry gate to the pedestrian overpass just beyond Neighborhood A, the road would contain one 14-foot-wide travel lane in each direction, with a 35-foot-wide parkway on southwest side and a 16-foot-wide parkway and an eight- to ten-foot-wide multi-purpose trail on the northeast side. At the overpass, the center landscaped median would end. From the overpass to the golf clubhouse, the road would contain a 32-foot-wide right-of-way for travel lanes, with 48 feet of parkway and landscaped slope on the southwest side and a 16-foot-wide parkway and an eight- to ten-foot-wide multi-purpose trail on the northeast side.

- **Neighborhood Entry Roads.** These roads would provide the main access to Neighborhoods A through G, as well as the swim and tennis club. These road rights-of-way would be 70 feet wide. They would contain a 14-foot-wide travel lane in each direction, separated by an eight-foot-wide median, with a five-foot-wide sidewalk and a six-foot-wide landscaped parkway on one side.
- **Neighborhood Roads.** These roads would extend off the neighborhood entry roads to provide access to individual lots. These road rights-of-way would provide 36 feet of width for travel lanes and on-street parking, with two-foot-wide parkways and nine-foot-wide parkway and public utility easements on either side.
- **Garin Park Lane.** This roadway would provide access off the project entry road to the joint school/park site and then generally south along the western site boundary, ending at the golf course maintenance center. Adjacent to the school site, the lane would contain a 24-foot-wide right-of-way for travel lanes, with an eight- to ten-foot-wide multi-purpose trail on the west side. South of this point, the lane would serve as a trail and access road for emergency vehicles, golf course maintenance vehicles, and golf course green waste refuse trucks; this road section would contain a 14-foot-wide travel lane with three-foot-wide shoulders and 30-foot-wide "fuel management easements" (for fire truck access to undeveloped open space areas) on either side. Every 500 feet, the lane would widen to 20 feet for a distance of 50 feet.

As a traffic calming measure, roundabouts, or traffic circles, would be located at five points along the project entry road: at the golf clubhouse, and at four intersections with neighborhood entry roads. As shown in Figure 10, the traffic circles would be 77 feet in diameter, and would be surrounded by a 31.5-foot-wide right-of-way for travel lanes, ten-foot-wide parkways, and eight- to ten-foot-wide sidewalks or multi-purpose trails. In addition, a total of eight traffic circles would be provided along neighborhood roads for traffic calming purposes (see Figure 10).

(b) Trails and Sidewalks. As shown in Figure 9, the project would provide right-of-way for the following trails and sidewalks:

- **Garin Park Trail,** which would extend from the joint school/park site southeast along Garin Park Lane. As indicated in Figure 9, a portion of the existing access road to the northern section of Garin Regional Park would be relocated onto Garin Park Lane.

- **Bay Area Ridge Trail**, which would extend through the southern portion and in the central portion of the project site between the golf course and the swim/tennis club, along the east side of the golf course, and around Neighborhood G.
- **A multi-purpose trail**, which would extend from the project entry along the northeast side of the project entry road to the golf clubhouse.
- **Sidewalks**, which would extend (1) from the golf clubhouse into Neighborhood C; (2) across the project entry road between Neighborhoods C and E, Neighborhoods B and D, and along the golf cart overpass northwest of Neighborhoods B and D; and (3) along the neighborhood entry road connecting Neighborhoods F, D, B, and G.

6. Grading

The project development area is proposed to be mass graded in order to achieve the desired development capacity.¹ The estimated grading quantity would be approximately 7.8 million cubic yards and would be balanced within the site.²

Grading would also be required in many areas to create the desired golf course fairways, rough, green and tee sites. The golf course grading plan has been designed to create a rounded visual character to the finished topography without sharp falls or angles.

7. Infrastructure

(a) Storm Drainage. The project would include an internal storm drainage system of inlets and small diameter pipes to collect and convey storm water runoff from lots, streets, golf course, and common areas. The storm drain pipes would convey flows into onsite detention basins. The detention basins would be used to regulate peak stormwater discharges into the downstream drainage network. In addition, the golf course design would include a number of infiltration and detention features.

(b) Water. There are no existing water facilities onsite. New facilities would be needed to provide water supply to the project homes and golf course. The proposed domestic water system would consist of transmission and distribution mains, a booster pump station, and two new 1,520-gallon water tanks. The proposed golf course would contain one lake (Lake A) that would provide supplemental water storage for irrigation. Golf course irrigation demands would be met through a combination of delivery from the municipal supply and water storage in onsite irrigation ponds. (See section IV.H.4 for more information on project water needs.)

¹Carlson, Barbee & Gibson, Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads and Grading for Hayward 1900 Property, Hayward, California; revised June 11, 1997.

²Ibid.

(c) Sewer. There are no existing sanitary sewer facilities onsite. New facilities would be needed to provide sewer service to the project. The new system would consist of onsite gravity sewer lines and offsite parallel relief sewer mains. The lines would be constructed within or adjacent to streets whenever possible. (See section IV.H.5 for more information on project sewer service needs.)

E. PROPERTY OWNERSHIP AND MAINTENANCE

1. Ownership

(a) Homeowners. The project applicant, Hayward 1900, intends to develop the project as a planned development, with each homeowner purchasing (1) a fee interest in an individual lot, and either (2) an undivided interest in the project common area along with all owners or (3) conveyance of the common area parcels to a homeowners' association.

(b) Golf Course. Hayward 1900 would either (1) own the golf course, golf clubhouse, and practice range and lease the management of these facilities to a golf course operator, or (2) sell the facilities to a separate golf course operator.¹

(c) Onsite Land Dedications. The applicant is currently negotiating dedication of the joint school/park site to the Hayward Unified School District (HUSD) and Hayward Area Recreation and Park District (HARD). If the joint school/park site is dedicated to these agencies, HUSD and HARD would be responsible for establishing an arrangement for joint use of the site.

The applicant would dedicate open space areas in the northeastern and southern portions of the project site to the East Bay Regional Park District or other public agency.²

(d) Property Exchanges and Purchases. The project includes property exchange or purchase between the applicant (Hayward 1900) and two adjoining property owners (East Bay Regional Park District and Roman Catholic Bishop of Oakland), as follows:³

- **East Bay Regional Park District property.** Hayward 1900 intends to enter into a land exchange agreement with the East Bay Regional Park District (EBRPD) to exchange the 20-acre EBRPD parcel that would be included in the development area (see Figure 5) for approximately 1,000 acres of onsite open space that would be dedicated to EBRPD. As

¹Hayward 1900, "Blue Rock Country Club Project, Statement Regarding Ownership and Maintenance (650 Units)," May 23, 1997.

²Wider, June 16, 1997.

³Wider, June 16, 1997.

shown in Figure 6, the preliminary development plan provides for construction of a road (the "E Loop"), associated utilities, and a portion of the golf course on the EBRPD parcel.

If approved by the EBRPD Board of Directors, Hayward 1900 would take fee title of the 20-acre parcel. This action would most likely occur over a two-year period because of a state law that prohibits the EBRPD from conveying more than 10 acres in any given year. Dedication of land to the EBRPD is intended to occur in phases in conjunction with project buildout.

In addition, any agreement between Hayward 1900 and the EBRPD would provide easements as appropriate for any other activity (e.g., slope easement, placement of fill, detention/water quality basin) that would occur on EBRPD property that would not be transferred to Hayward 1900. Any agreement would also provide for use of portions of the dedicated open space as mitigation areas for wetlands and other biological resources affected by the project.

- **Roman Catholic Bishop of Oakland property.** Hayward 1900 is currently negotiating a purchase agreement with the Roman Catholic Bishop of Oakland. The current intention is that Hayward 1900 would ultimately purchase the 57-acre Roman Catholic Bishop property that is included in the development application (see Figure 5) and develop this property along with the Hayward 1900 property. The proposed development application and proposed revisions to the 1995 Walpert Ridge Specific Plan (see subsection F, "Proposed Project Approvals," below) allocate 47 housing units to the Roman Catholic Bishop property. Because the Hayward 1900 and Roman Catholic Bishop properties have been combined on the proposed preliminary development plan, not all 47 units would be constructed within the boundaries of the Roman Catholic Bishop parcel. As shown on Figure 6, the preliminary development plan provides for construction of the golf course maintenance center, all or portions of 37 residential lots, and a portion of the golf course on this parcel.

2. Maintenance

The homeowners' association would maintain all common areas (e.g., streets, landscaped areas, gatehouse/entryway, small parks, swim and tennis club) and perform certain maintenance responsibilities, such as fire hazard abatement.

F. PROPOSED PROJECT PHASING AND CONSTRUCTION SCHEDULE

The applicant proposes to construct the project in two main phases, as follows:¹

- **Phase I.** This phase would consist of mass grading of the entire site, construction of the elementary school facilities (i.e., classrooms for 350 students, plus library, multipurpose room, restrooms, and offices) (if a mutually acceptable agreement is negotiated between the applicant and the Hayward Unified School District), and construction of some of the single-family houses (in 100-house increments, based on market demand and other factors). School construction would begin upon issuance of the building permit for the twenty-fifth housing unit in the development. Construction of the golf course would begin in this phase, with either construction of all 18 holes or possibly only nine holes, depending on the market demand, the role of the golf course in the project's housing marketing strategy, and the possible involvement of a separate golf course owner/developer.² Based on similar factors, construction of the golf clubhouse and swim/tennis club may take place during the first phase. All or a portion of the roads would be constructed during this phase.
- **Phase II.** The second phase would consist of construction of housing and any portions of the golf course and roadways not constructed in Phase I. The golf clubhouse and swim/tennis club would be constructed during this phase if they have not been built during Phase I.

The total buildout period for the project is currently estimated at five to six years from project approval.³

G. REQUIRED PROJECT APPROVALS

1. City of Hayward

The project as currently proposed would involve the following approvals by the City of Hayward:⁴

¹Hayward 1900, "Blue Rock Country Club Project, Delineation of Project Phasing (650 Units)," May 23, 1997.

²Wider, June 16, 1997.

³Wider, June 16, 1997.

⁴"Hayward 1900 Property, Catholic Church Property, and A Portion of the East Bay Regional Park Property, Walpert Ridge, Revised Development Permit Application, Blue Rock Country Club Project, City of Hayward, Alameda County" (attachment to letter from Lori Wider, Sheppard, Mullin, Richter & Hampton (attorneys for project applicant) to Hanson Hom, City of Hayward, re. "Blue Rock Country Club Project," May 9, 1997).

- (a) Amendment of the *Growth Management Element* and/or General Policies Plan Map to change the land use designation of the area within the *Urban Limit Line* (315 acres) from *Residential, Suburban Density (1.0 to 4.3 dwelling units per net acre)* to *Residential, Low Density (4.3 to 8.7 dwelling units per net acre)* (see Figure 11).
- (b) Amendment of the policies of the Walpert Ridge Specific Plan to:
 - (1) Increase the housing allocation for the Hayward 1900 property from the currently allowed range (413 units to a maximum potential of 453 units¹) to 603 units, and to increase the housing allocation for the Roman Catholic Bishop of Oakland property from 32 to 47 units;
 - (2) Allow for lot sizes varying from 5,000 to over 10,000 square feet (rather than the current minimum lot size of 9,000 square feet);
 - (3) Allow for all padded lots instead of a mixture of padded, limited padded, and sloped lots;
 - (4) Allow for private streets and reduced street standards; and
 - (5) Amend the development standards and design guidelines.

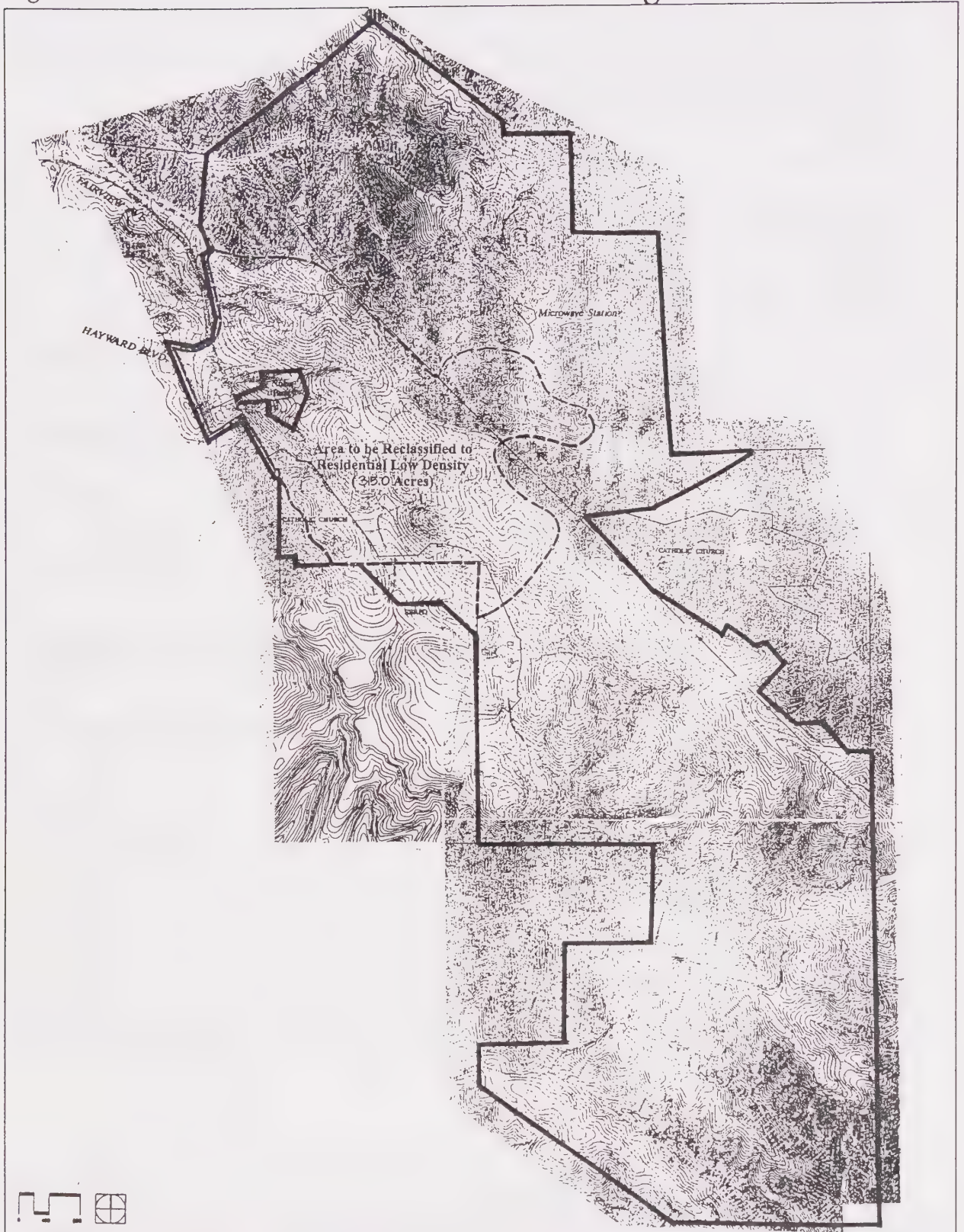
(NOTE: A complete set of proposed amendments to the Walpert Ridge Specific Plan is on file at the City of Hayward Department of Community and Economic Development.)
- (c) Rezoning of 585 acres from AG (Agricultural District) to PD (Planned Development District) (see Figure 12);
- (d) Approval of a Preliminary Development Plan (including City Council approval of extension of residential use to 0.1 mile beyond the 1.5-mile service area of Fire Station No. 5, as provided by the Walpert Ridge Specific Plan); and
- (e) Execution of a Development Agreement between the City of Hayward and the project applicant, Hayward 1900.

Hayward 1900 intends to process a precise development plan and a vesting tentative map for the project (consistent with the project analyzed in this SEIR), and would file applications for

¹The existing Walpert Ridge Specific Plan housing allocation (with density bonus) for the Hayward 1900 property is 413 units. The Specific Plan (page 22) states that "if Walpert Ridge property owners/developers enter into a mitigation agreement with HUSD (Hayward Unified School District), Hayward 1900's housing allocation will be 433-453 units."

Figure 11

Proposed General Plan Land Use Designation Amendment

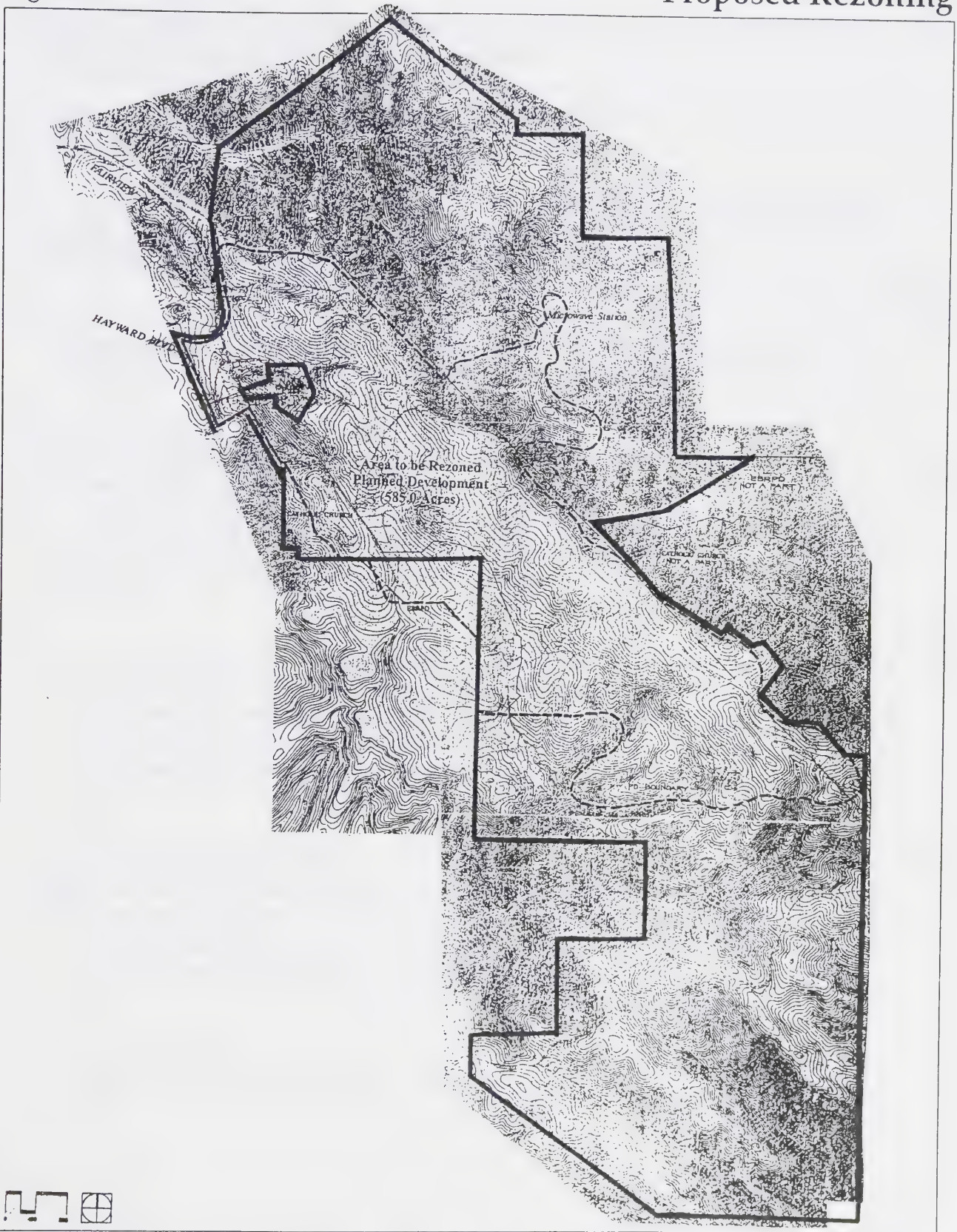


SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

Figure 12

Proposed Rezoning



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR ■ City of Hayward
Wagstaff and Associates ■ Urban and Environmental Planners

these approvals following completion of items (a) through (e) above.¹ This SEIR is intended to cover these subsequent approvals. If substantial changes were proposed, the City of Hayward would need to determine whether this SEIR adequately addresses the potential environmental impacts of the project as modified, or whether additional environmental review must be conducted.

2. Other Approvals

In addition to the City of Hayward approvals listed above, the project would be subject to the jurisdiction of the following agencies and would require the following approvals:²

- (a) U.S. Army Corps of Engineers - A Section 404(b)(1) permit under the federal Clean Water Act (33 U.S.C. section 1344) would be required due to the project's impact on jurisdictional waters of the United States.
- (b) U.S. Fish and Wildlife Service - As part of the Section 404(b)(1) permit process (see (a) above), under the federal Endangered Species Act (15 U.S.C. section 1531 et seq.), the U.S. Army Corps of Engineers is required to consult with the U.S. Fish and Wildlife Service if the project may jeopardize the continued existence of a threatened or endangered species. The U.S. Fish and Wildlife Service may suggest conditions to be imposed on the Section 404(b)(1) permit.
- (c) California Department of Fish and Game - In connection with the project's wetland impacts, a Streambed Alteration Permit under Section 1603 of the California Fish & Game Code would be required. With respect to the project's impact on Alameda Whipsnake habitat, a Section 2081 Permit under the Fish and Game Code may be required, depending on the outcome of a current court and legislature review of the Department's authority to issue these permits.
- (d) Regional Water Quality Control Board - In connection with the Section 404(b)(1) permit process discussed above (see (a)), the applicant would be required to obtain certification of compliance with state effluent limitations and water quality standards (Section 401 of the Clean Water Act (33 U.S.C. section 1341)). In addition, the applicant would be required to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements pursuant to Section 402 of the Clean Water Act.
- (e) Alameda County Flood Control District - The applicant would be required to obtain review and approval of storm drainage plans and possible acceptance of dedication of detention basins.

¹Ibid.

²Wider, June 16, 1997.

- (f) East Bay Regional Park District - The applicant would be required to obtain approval of the proposed land transaction.
- (g) Hayward Area Recreation and Park District - The applicant would be required to obtain approval of the proposed park dedication.
- (h) Hayward Unified School District/Castro Valley Unified School District - The applicant would be required to obtain approval of a school district boundary adjustment to include the project site solely within the boundary of the Hayward Unified School District.
- (i) Hayward Unified School District - If the development agreement or conditions of approval require that an up-front school be constructed, the applicant would be required to obtain approval of the proposed school site dedication and school construction.
- (j) Pacific Gas & Electric Company (and other utilities) - The applicant would be required to obtain will-serve letters and approvals of engineering plans and utility access.

IV. SETTING, IMPACTS, AND MITIGATIONS

A. LAND USE AND OPEN SPACE

This SEIR section addresses the various land use issues raised by the proposed project, including the loss of open space; implications of converting portions of the site to residential, golf course, and school use; the compatibility of the proposed project land use changes with nearby existing and planned residential and open space uses; and the implications of the associated requests to amend the City of Hayward General Plan and Walpert Ridge Specific Plan.

Project consistency with adopted local and regional land use plans, including the Hayward General Plan and the Walpert Ridge Specific Plan, is also discussed in section V of this SEIR (Consistency with Adopted Plans and Policies) of this SEIR.

1. SETTING

a. Existing Onsite Land Uses

Figure 4 in section III (Project Description) illustrates existing onsite land use characteristics, and Figure 5 in section III shows existing onsite topography and parcelization characteristics.

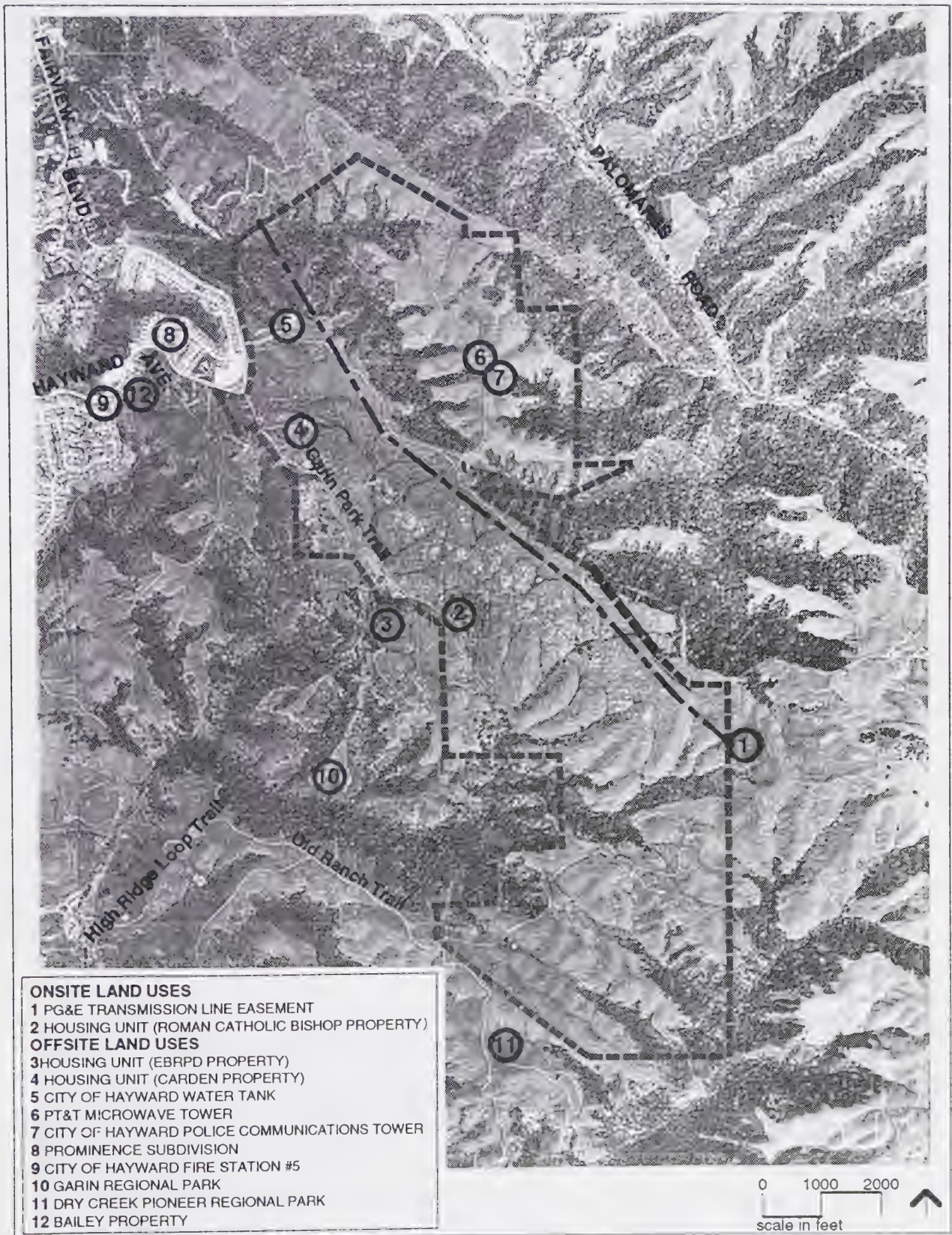
(1) Natural Features. As shown on the figures, the site is defined by a major northwest-southeast trending ridge, with several narrow secondary ridges branching off of the main ridge. The slopes surrounding the ridge areas are covered with oak woodland and intervening pockets of coastal scrub (primarily coyote brush and sagebrush).

(2) Manmade Features. Figure 13 indicates the location of major manmade features on the project site. As shown on the figure, onsite urban development consists of the following uses (see Figure 5 in section III):

- a 75-foot-wide PG&E electrical transmission tower line and easement that extends through the central portion of the 1,558-acre Hayward 1900 property;
- one currently unoccupied housing unit and associated ranch structures in the southeastern portion of the 57-acre Roman Catholic Bishop of Oakland property; the gravel service road described above also provides access to this housing unit; and
- an easement for a Ridge Loop Trail connection to EBRPD's Garin Park, which extends from Hayward Boulevard/Fairview Avenue south through the site along an existing fire road to Garin Regional Park.

Figure 13

Project Vicinity Land Uses



(3) Agricultural Uses. Portions of the project site are currently used and have historically been used for cattle grazing.

b. Surrounding Land Uses

(1) Peripheral Land Uses. Figures 4, 5, and 13 illustrate the relationship of the project site to surrounding land uses and parcelization patterns. As shown in the figures, the project site is bounded by open space to the north, the western ridgetop of Palomares Canyon to the east, Dry Creek Pioneer Regional Park and other open space to the south, and Garin Regional Park, other open space, and the 153-unit Prominence subdivision (located across Hayward Boulevard) to the west. One currently unoccupied housing unit (the former Meincke residence) is located on East Bay Regional Park District (EBRPD) property immediately west of the 20-acre portion of the project site owned by EBRPD; a gravel service road that extends off Hayward Boulevard/Fairview Avenue along the western edge of the project site provides access to this housing unit.

(2) Enclosed But Separate Land Uses. Figure 13 also shows the location of the following land uses that are located on internal properties that are surrounded by, but not included in, the project site:

- a single-family residential structure and associated ranch buildings on the Carden property, adjoining the northwestern portion of the project site; an road extending off the gravel service road along the western boundary of the project site provides access to this building complex;
- a regional communications tower owned by Pacific Telephone and Telegraph (PT&T) on a one-acre site adjoining the northeastern portion of the project site; PT&T maintains an access easement on project site roads for access to this facility;
- a City of Hayward Police Department communications tower on a 2,500-square-foot parcel abutting the PT&T site; the City maintains an access easement on project site roads to serve this facility; and
- a City of Hayward water tank adjoining the northwestern portion of the project site; the City maintains a roadway easement off Fairview Avenue for access to this facility.

c. Citywide Land Use Considerations

(1) Existing Hayward Urbanization. The City of Hayward boundary currently encompasses approximately 43 square miles, exclusive of the area within San Francisco Bay. The project site is located within the area defined by the City's General Plan as the Hayward Hills. The Hayward Hills lie in the easternmost portion of Hayward; the hills are partially developed with residential uses, and the California State University at Hayward; substantial areas remain as undeveloped open space. The community's commercial land uses are generally concentrated in central Hayward (downtown, along Mission Boulevard, and at the Southland Shopping

Center); industrial uses are generally located in the western portion of the city, adjacent to San Francisco Bay and associated baylands.

(2) Parks and Open Space. As discussed in section IV.H (Public Services) of this SEIR under "Parks and Recreation" (subsection IV.H.6), the Hayward Area Recreation and Park District (HARD) maintains various community-serving park and recreation facilities in the project site vicinity, including Canyon View Park, Highland Park, College Heights Park, recreational facilities at California State University at Hayward, and a network of bicycling, hiking, and equestrian trails managed by HARD and the East Bay Regional Park District (EBRPD) along Ward Creek north of Hayward Boulevard up to Walpert Ridge. HARD also recently acquired the Lewis property, which is located off Hayward Boulevard and designated for park use. In addition, EBRPD's Garin Regional Park and Dry Creek Pioneer Regional Park, which adjoin the project site to the southwest, provide approximately 3,145 acres of region-serving park land for nature study, picnicking, hiking, horseback riding, and fishing.

EBRPD has also recently acquired two additional properties adjacent to the project site:

(1) an approximately 1,100-acre property (not open for public use) adjoining the east side of the project site; and (2) an approximately 283-acre regional trail corridor adjoining the northern corner of the project site, which will contain the future alignment of the Bay Area Ridge Trail.¹

Another large area of privately-held open space in the Hayward area that may be developed in the near future is the approximately 330-acre site known as the South of 92 Study Area located in the southwest portion of Hayward, which is currently the subject of a specific plan formulation effort. The preferred alternative selected by the City Council includes a range of business park and light industrial uses, with some local-serving retail and a sports park on the approximately 122 acres of the Oliver East and Alameda County Flood Control District property between Hesperian Boulevard and the railroad tracks south of Industrial Boulevard; residential uses on approximately 84 acres of Oliver West property, which lies west of the railroad tracks; and industrial uses on approximately 22 acres of Weber property, which lies to the south and west of Baumberg and Arden. The City Council is expected to review the specific plan in October, 1997.

(3) Golf Courses. As discussed in the Public Services section of this SEIR (subsection IV.H.6.a(4)), there is one golf course currently operating in the City of Hayward--the 125-acre, 18-hole Skywest Golf Course, located at 1401 Golf Course Road in the northern portion of the city, west of Interstate 880 and Hesperian Boulevard, next to the Hayward Airport. In addition, the City is currently considering a proposal for development of a nine-hole golf course near the intersection of Industrial Parkway and Mission Boulevard, on the site of the former Hayward Golf Course. Other operating golf courses near Hayward that are available for use by Hayward residents include (a) the 18-hole Willow Park Golf Course in Castro Valley, (b) the

¹Linda Chavez, Park Planner, East Bay Regional Park District; personal communication, June 11, 1997.

18-hole Tony Lema Golf Course in San Leandro, (c) the Sunol Valley Golf Course consisting of two 18-hole courses in Sunol, (d) the 18-hole Lake Chabot Municipal Golf Course in Oakland, (e) the Alameda Municipal Golf Course consisting of two 18-hole courses and one nine-hole course in Alameda, and (f) the nine-hole Parkway Golf Course in Fremont (which is expected to close in 1997 in anticipation of residential development on the site). Most of these courses are reported to be operating at close to maximum capacity.¹

According to HARD staff and the *Technical Report* prepared for the HARD Master Plan, there is a demand for more golf courses in the Hayward area, as further explained in the Public Services section (subsection IV.H.6.a(5)) of this SEIR.

(4) Current Hayward Population and Job Growth Trends. Table 4 shows existing and projected population and job growth in Hayward, as compared with Alameda County and the San Francisco Bay region as a whole. As shown in the table, Hayward's 1995 population of 129,500 is projected to grow to 138,700 by 2005 and 140,700 by 2015. The city's total number of jobs, estimated at 74,480 in 1995, is projected to increase to 84,360 by 2005 and 95,150 by 2015. As indicated in the table, the city has more local jobs than local employed residents, translating to a *jobs/employed resident ratio* of 1.35 in 1995. ABAG data indicate that the City's jobs/employed resident ratio will be 1.27 in the year 2005 and 1.37 in 2015.²

¹Wagstaff and Associates, Draft Environmental Impact Report for the Proposed Stony Brook Place Residential Planned Development Project, City of Hayward, September 1995; page 73.

²The term "jobs/housing ratio" is commonly used to describe the relationship between the number of local jobs available and the number of local employed residents. While "jobs/housing ratio" is the term most often used, the "jobs/employed resident ratio" is the more precise measure of the local relationship of housing to jobs, since households, on average, contain more than one employed resident. To the degree that a balance is achieved between local jobs and employed residents, there may be greater opportunity for local residents to work close to where they live. A "balanced" local "jobs/housing ratio" therefore tends to reduce a community's contribution to regional traffic congestion, noise, and air quality impacts. Where a city's local jobs/employed resident ratio is substantially higher than the regional ratio, a higher tendency toward in-commuting is indicated; where the local ratio is substantially lower than the regional ratio, a higher tendency toward out-commuting is indicated.

Table 4
ESTIMATED POPULATION AND JOB GROWTH--HAYWARD, ALAMEDA COUNTY, AND
BAY REGION, 1995-2015

	<u>1995</u>	<u>2005</u>	<u>2015</u>
Hayward			
Total population	129,500	138,700	140,700
Total households	44,280	47,350	49,750
Total jobs	74,480	84,360	95,150
Total employed residents	55,800	66,300	69,700
Ratio (jobs/households)	1.68	1.78	1.91
Ratio (jobs/employed residents)	1.35	1.27	1.37
Alameda County			
Total population	1,364,600	1,518,700	1,591,500
Total households	491,350	539,630	582,400
Total jobs	608,770	712,420	810,320
Total employed residents	614,500	735,800	791,500
Ratio (jobs/households)	1.24	1.32	1.39
Ratio (jobs/employed residents)	0.99	0.97	1.02
Bay Region			
Total population	6,492,950	7,296,250	7,720,950
Total households	2,338,560	2,606,090	2,830,450
Total jobs	3,028,290	3,585,640	4,021,780
Total employed residents	3,125,900	3,656,800	3,939,600
Ratio (jobs/households)	1.30	1.38	1.42
Ratio (jobs/employed residents)	0.97	0.98	1.02

SOURCE: ABAG, Projections 96, December 1995; Wagstaff and Associates, 1996 (jobs/households and jobs/employed residents ratios).

d. Cumulative Development Activity

(1) Cumulative Development on Walpert Ridge. In addition to the currently proposed 650-unit Blue Rock Country Club project that is the subject of this SEIR, the following residential development projects may be expected on Walpert Ridge:¹

- 135 units on the Bailey property, which adjoins the western boundary of the project site (see Figure 13) (development application pending); and
- 20 units on the Carden property, which adjoins the northwestern portion of the project site (see Figure 13).

These projects (155 units), combined with the 650 units proposed by the Blue Rock Country Club project, would produce a total of 805 housing units on Walpert Ridge.

(2) Cumulative Development Citywide. Table 5 lists citywide residential development potential by neighborhood and census tract, along with anticipated commercial and industrial projects in the city. Figure 14 illustrates the location of Hayward neighborhoods and census tracts listed in Table 5.

As indicated by Table 5, citywide there is a potential for development of up to 8,976 additional housing units (including the 805 units in the Walpert Ridge area) is anticipated citywide. In addition, there are a number of commercial and industrial projects approved or pending in Hayward that are also listed in Table 5.

e. Relevant City of Hayward Plans and Policies

This subsection reviews City of Hayward plans and policies regarding land use and open space in the project site vicinity. Project consistency with these and other adopted local and regional land use plans and policies, including the Hayward General Plan and the Walpert Ridge Specific Plan, is evaluated in section V (Consistency with Adopted Plans and Policies) of this SEIR.

(1) City of Hayward General Plan. Pertinent City of Hayward General Plan policies and provisions regarding land use and open space are described below.

¹Memo from Hanson Hom, City of Hayward, to John Wagstaff et al., re. "Potential Units on Walpert Ridge," May 7, 1997. The estimate for the Bailey property is based on the current development proposal (the "Keenan proposal") for this site. The estimate for the Carden property assumes that the developer of this property would request an increase in development potential proportionate to that currently requested by Hayward 1900 for the Blue Rock Country Club project. Assuming an increase of 43 percent over the 14 units currently allowed on the Carden property, 20 units could be developed on the property.

Figure 14

Hayward Neighborhoods and Census Tracts

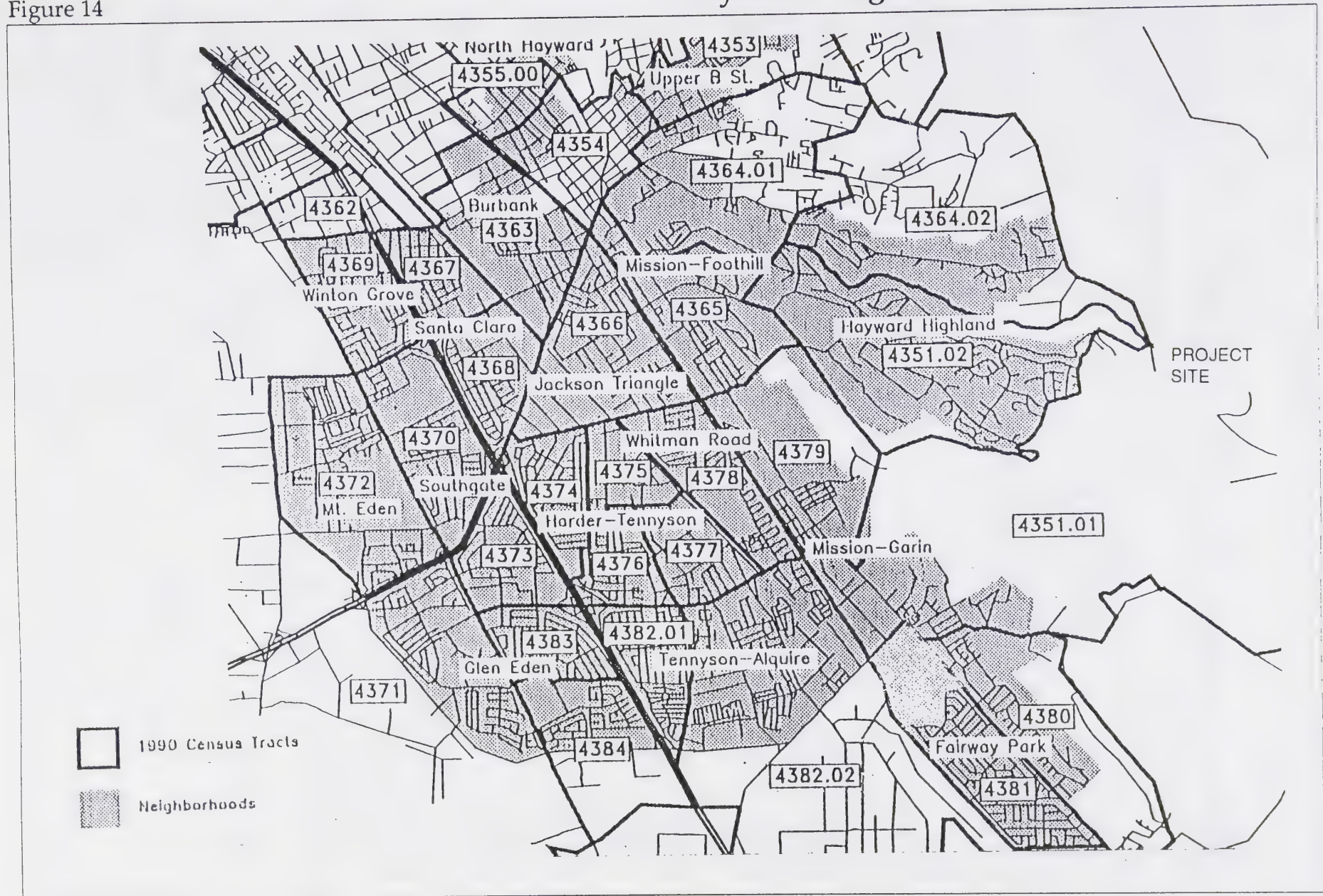


Table 5

ADDITIONAL LAND DEVELOPMENT POTENTIAL IN HAYWARD

RESIDENTIAL:

Neighborhood	Census Tract	Estimated Housing Potential		
		Minimum	Midpoint	Maximum
Burbank	4363 (partial)	94	239	383
Downtown	4354 (pt.), 4363 (pt.)	250	615	980
Fairway Park	4381	428	428	428
Glen Eden	4371, 4383, 4384	0	0	0
Harder-Tennyson	4374, 4375, 4376, 4377	29	45	61
Highlands*	4351.02, 4364.02, 4351.01 (pt.)	702	925	1,147
Jackson Triangle	4366	317	476	634
Longwood-Winton Grove	4362, 4369	12	19	25
Mission-Foothills	4364.01, 4365	800	1,200	1,600
Mission-Garin	4379, 4380, 4351.01 (pt.)	537	791	1,045
Mt. Eden	4372	429	644	859
North Hayward	4312, 4355, 4354 (pt.)	0	0	0
Santa Clara	4367, 4368	0	99	198
Southgate	4370, 4373	0	0	0
Tennyson-Alquire	4382.01, 4382.02	290	435	580
Upper B Street	4353, 4354 (pt.), 4352	208	312	416
Whitman Road	4378	185	288	390
Total Number of Units*		4,281	6,516	8,746

COMMERCIAL AND INDUSTRIAL:

Project Name/Location	Type	Status
Berkeley Farms milk bottling plant	Industrial	IP
South of 92 project	Industrial/Residential	IP
Whipple/Wiegman project	Commercial Retail	IP
Mt. Eden nursery site	Industrial	IP

SOURCE: City of Hayward, Department of Community and Economic Development, 1995 and 1997.

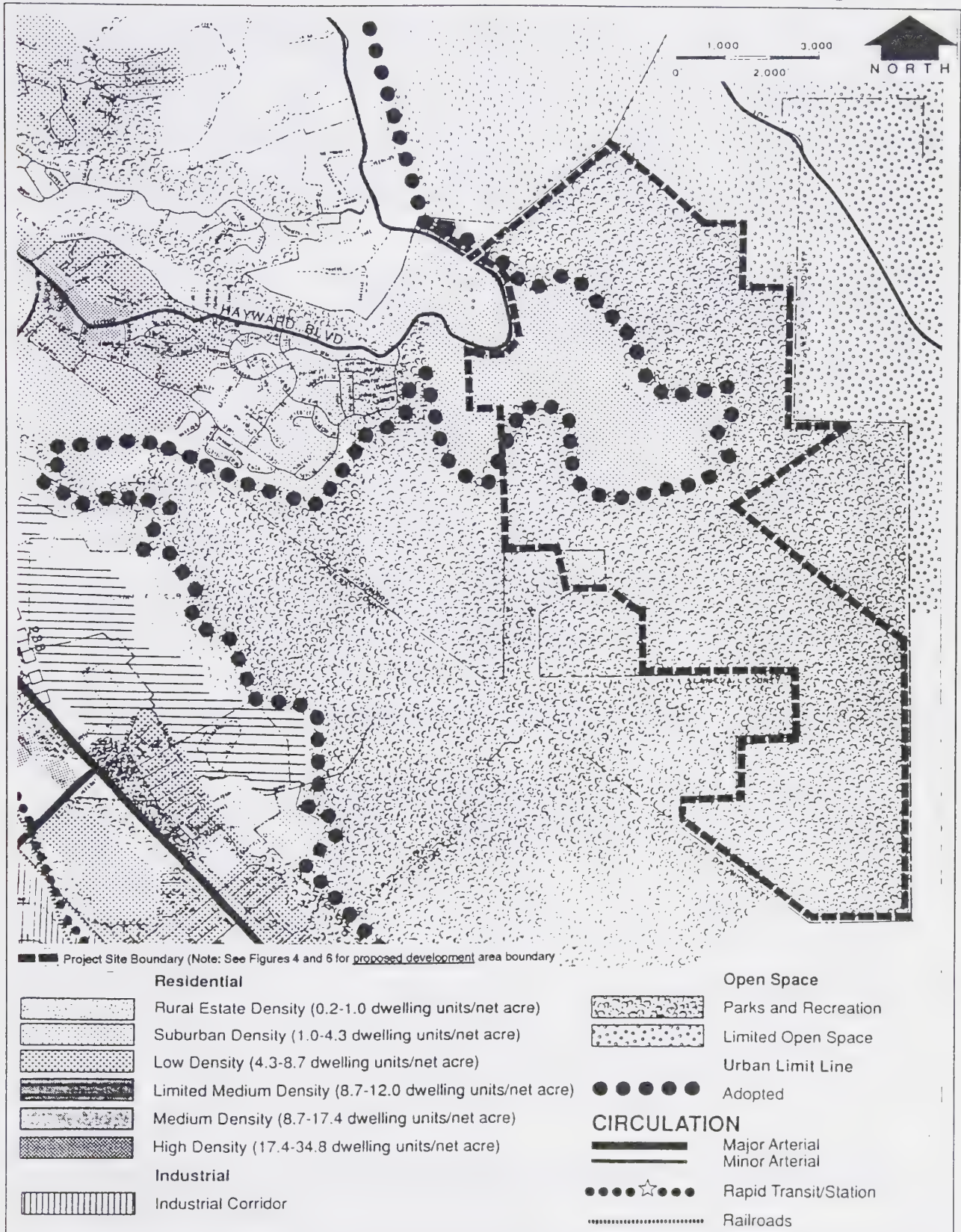
LEGEND: IP = development application in process

* The Highlands neighborhood includes the Walpert Ridge area (i.e., Blue Rock Country Club project site and surrounding area). Estimated housing development potential in the Highlands neighborhood includes 575 units in the Walpert Ridge area, as currently allowed by the Walpert Ridge Specific Plan (i.e., 500 units plus a 15-percent density bonus). Potential development in the Walpert Ridge area (including the Blue Rock Country Club project evaluated in this SEIR) could provide a total of 805 units (see discussion under "d. Anticipated Cumulative Development Activity" in SEIR text). If the City were to approve these proposals (including necessary amendments to the Walpert Ridge Specific Plan), the additional housing development totals shown in this table would be revised as follows:

	Minimum	Midpoint	Maximum
Highlands neighborhood:	932	1,155	1,377
Total (citywide):	4,511	6,746	8,976

Existing Hayward General Policies Plan Land Use Designations

Figure 15



Land Use Designations. As shown in Figure 15, the General Policies Plan Map¹ designates the portion of the project site located within the *Urban Limit Line* (approximately 315 acres) as *Residential, Suburban Density (1.0 to 4.3 units per net acre)*. Typical development allowed within this designation is single-family detached housing, with typical lot sizes of 10,000 square feet or more.² The remainder of the project site is designated as *Open Space, Parks and Recreation*. Allowable land uses within this designation include regional parks, community and neighborhood parks, and special use facilities such as golf courses, historic estates, linear parks and trails.³

The General Plan Growth Management Element designates the portion of the project site located outside the *Urban Limit Line* as *Land to be Dedicated for Public Open Space in Connection With Development*, and calls for the proposed Bay Area Ridge Trail to extend through the project site.⁴

Urban Limit Line. The General Policies Plan Map designated *Urban Limit Line (ULL)* is intended to establish a boundary between urban development (e.g., Residential, Commercial, and Industrial designations) and open space (e.g., Baylands, Limited Open Space, and Regional Parks designations).⁵ As shown in Figure 15, the current ULL designation extends from Hayward Boulevard/Fairview Avenue to encompass the portion of the project site currently designated *Residential, Suburban Density (1.0 to 4.3 units per net acre)* on the General Policies Plan Map. In this hillside area of the city, the ULL is generally defined by natural topographical constraints and by the 1.5-mile service area of Fire Station No. 5, located at Hayward Boulevard and Skyline Drive.

Land Use Policies. The City of Hayward General Plan contains the following pertinent policies regarding land use and open space:

- *Retain fingers of open space to define the ridges and canyons and connect open hill spaces to the Bay Plain.* (General Policies Plan, City Image policies, Strategy 7, page II-15)

¹Adopted as part of the Hayward General Policies Plan on May 6, 1986, by City Council Resolution No. 86-127; as amended through February 25, 1997.

²City of Hayward, General Policies Plan, page X-2.

³Ibid., page X-4.

⁴City of Hayward, Growth Management Element, adopted as part of the General Plan by the City Council on July 13, 1993, with amendments as of January 9, 1996, "Open Space Framework" map, page 3.

⁵City of Hayward, General Policies Plan Map and General Policies Plan, page X-5.

- *Require hill development to respect natural contours and to blend with natural vegetation. (General Policies Plan, City Image policies, Strategy 7, page II-15)*
- *Seek to maintain the current balance between housing and jobs in the Hayward area. (General Policies Plan, City Image policies, Strategy 1, page II-16)*
- *Achieve a balance between the local employment base and the housing supply. (General Policies Plan, Housing and Neighborhood Preservation policies, Strategy 1, page IV-19)*
- *Grant density bonuses or other incentives in return for provision of a certain percentage of lower and moderate income housing to new residential developments. (General Policies Plan, Housing and Neighborhood Preservation policies, Strategy 2, page IV-19)*
- *Recognize the need for some lower and moderate income family housing when considering new residential developments. (General Policies Plan, Housing and Neighborhood Preservation policies, Strategy 2, page IV-19)*
- *Establish buffers such as landscaping or transitional land uses between residential areas and conflicting land uses. (General Policies Plan, Housing and Neighborhood Preservation policies, Strategy 14, page IV-21)*
- *Designate areas...in the hills...to be protected as open space in coordination with East Bay Regional Parks District, Hayward Area Recreation and Park District, Alameda County, and other affected agencies. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 1, page VII-13)*
- *Restrict the amount of impervious coverage (buildings, structure, and paving) in open space areas in order to retain its character. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 5, page VII-13)*
- *Seek public acquisition of open space as a mitigation measure offsetting adverse environmental impact of projects. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 8, page VII-13)*
- *Seek dedication of highly visible and usable open space to satisfy park dedication requirements. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 9, page VII-13)*
- *Implement plans for a continuous green belt from Lake Chabot to Garin Park with development policies for that area coordinated with Alameda County, Hayward Area Recreation and Park District, East Bay Regional Park District, and other agencies. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 1, page VII-14)*
- *Seek clustering of development which maintains continuity of open space. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 6, page VII-14)*

- *Guide development into patterns which reduce automobile usage since automobiles are the principal source of air pollution.* (General Policies Plan, Environmental Concerns policies, Strategy 8, page VIII-15)
- *Promote development patterns integrated with existing transit systems...* (General Policies Plan, Environmental Concerns policies, Strategy 1, page VIII-19)

Regional Housing Needs. Under Section 65581.4 of the California Government Code, cities and counties are required to make a sustained, serious effort to provide for their appropriate share of regional housing needs, as determined by local councils of governments. In pursuit of this mandate, ABAG, which is the council of governments for the nine-county San Francisco Bay region, periodically makes housing needs determinations for each city and county in the region. The determinations are based on anticipated employment opportunities, commuting patterns, and site availability for residential development.¹ The *Housing Element* of the City of Hayward General Plan is periodically updated with estimates of the number of housing units that need to be developed in Hayward in order to provide the city's share of regional housing need, as determined by ABAG.

State law also requires that the needs determination for each city and county be expressed in terms of four specified income levels, so that each jurisdiction can make plans to provide for its "fair share" of regional housing needs by income group. To make these determinations, ABAG uses the conventional U.S. Department of Housing and Urban Development (HUD) defined income categories of **very low** for those households earning up to 50 percent of the median income for the region, **low** for those earning more than 50 percent and up to 80 percent of the median income, **moderate** for those earning more than 80 percent and up to 120 percent of the median income, and **above moderate** for those earning more than 120 percent of the median regional income.

The 1997 median income for a four-person household in Alameda County (i.e., the Oakland Primary Metropolitan Statistical Area) reported by HUD was \$60,100. Assuming a 1997 median regional annual household income of approximately \$60,100, the City of Hayward defines very low-income households as those earning up to \$30,050 in 1997, low-income households as those earning from \$30,051 to \$43,500, moderate-income households as those earning from \$43,501 to \$72,100, and above moderate-income households as those earning over \$72,100.²

¹Association of Bay Area Governments, San Francisco Bay Area Housing Needs Determinations, January, 1989, page 20.

²These figures reflect an adjustment made by HUD for housing in high-cost areas, and therefore do not conform strictly to the standard HUD income-level categories. It is also important to note that the income categories can be adjusted to household size.

The housing needs estimates for Hayward contained in ABAG's January 1989 (most recent) housing needs determination document¹ stated that the city needed to provide a total of 8,734 housing units between 1988 and 1995 in order to accommodate its share of projected regional growth. Of these 8,734 units, ABAG suggested that 2,096 (24 percent) needed to be affordable to very low-income households, 1,485 (17 percent) to low-income households, 1,921 (22 percent) to moderate-income households, and 3,232 (37 percent) to above moderate-income households.² ABAG housing needs estimates beyond the year 1995 are not available as of this writing. The State legislature has extended the planning period for the 1988-1995 determinations to July, 1999; this means that the city has until July, 1999 to meet the ABAG housing needs determinations.

As part of its *Housing Element*, the City adjusted the ABAG 1988-1995 housing need estimates to represent housing need within the existing city limits only. The State Department of Housing and Community Development (HCD) certified the City's *Housing Element* with these adjusted housing need estimates.³

Table 6 shows the city's adjusted 1988-1995 housing need estimates, along with actual housing production experienced in the city for the 1988-1996 period. As shown in Table 6, the city has not met its adjusted housing targets in any of the four income categories. City staff estimates that, based on existing General Plan designations and allowed density ranges, there is the potential to develop 4,281 to 8,746 new housing units, as shown in Table 5. If new housing were developed at the low end of the allowable density ranges (4,281 total units), the city would not meet its remaining total adjusted 1988-1995 housing need (5,234 units). Development at the midpoint (6,516 units) or high end (8,746 units) of the allowable density range would allow the city to meet its total adjusted housing need.

(2) Walpert Ridge Specific Plan. The Walpert Ridge Specific Plan, adopted by the City of Hayward on July 25, 1995, contains policies that address land use, development prerequisites, financing, implementation, and design standards and guidelines on Walpert Ridge, including the project site. Pertinent Walpert Ridge Specific Plan policies and provisions regarding land use and open space are as follows:

- *All urban development shall be located within the Urban Limit Line, as designated on the General Policies Plan Map... (Policy I.A.1, page 19)*

¹ABAG does not anticipate publishing a new housing needs determination document until 1999.

²Association of Bay Area Governments, San Francisco Bay Area Housing Needs Determinations, January 1989, page 45.

³Telephone conversation with Gary Calame, Senior Planner, City of Hayward Department of Community and Economic Development, August 14, 1997.

Table 6

CITY OF HAYWARD ADJUSTED 1988-1995 HOUSING NEED ESTIMATES AND 1988-1996 HOUSING PRODUCTION FIGURES

Income Level	Adjusted 1988-1995 Need (Units)	1988-1996 Housing Production								Total Units
		1988-89	1990	1991	1992	1993	1994	1995	1996	
Very Low	1,677	16	0	0	21	16	22	0	0	75
Low	1,188	81	0	18	33	26	28	0	4	190
Moderate	1,537	188	16	21	85	186	44	34	45	619
Above Moderate	2,586	207	93	102	470	24	57	76	68	1,097
TOTALS	6,988	492	109	141	609	252	151	110	117	1,981

SOURCE: City of Hayward

Notes:

- (1) Adjusted 1988-1995 housing need estimates were prepared by the City of Hayward for its *Housing Element*, and represent housing need within the existing city limits only.
- (2) The 1993 single-family market rate units produced (48) are assumed to be split evenly between moderate and above-moderate income household levels.
- (3) Of the 204 multi-family units produced in 1993, a 36-unit development assisted by the City served very low- and low-income households. A six-unit rental development is assumed to serve low-income households. Of the remaining units, 162 units were condominiums and are assumed to serve moderate-income households.

- *A minor extension of residential use beyond the 1.5-mile service area of Fire Station No. 5 may also be approved by the City Council (maximum 0.1 mile) as shown in the Land Use Plan... (Policy I.A.3, page 19)*
- *Land uses (within the urban development area) shall be consistent with the **Residential, Suburban Density (1.0-4.3 units per net acre)** designation in the General Plan. (Policy I.B.1.a, page 19)*
- *The primary land uses permitted (within the urban development area) shall consist of:*
 - *Single-family detached housing;*
 - *Elementary school;*
 - *Public and private park and recreational facilities;*
 - *Structures of public agencies and utility companies;*
 - *Hiking/riding trail and staging area; and*
 - *Open space. (Policy I.B.1.b, pages 19-20)*
- *Land uses (outside the urban development area) shall be consistent with the **Open Space, Parks and Recreation** designation in the General Plan. (Policy I.B.2.a, page 20)*
- *Permitted uses (outside the urban development area) shall consist of open space, community parks, hiking/riding trail and staging area, cattle-grazing, structures of public agencies and utility companies and, subject to City Council approval, other low-intensity recreational and agricultural uses. (Policy I.B.2.b, page 20)*
- *Within the Urban Development Area, development applications may be approved for a total of 500 single-family detached housing units on lots containing an average area of 10,000 square feet. No lot shall contain an area less than 9,000 square feet. (Policy I.C, page 20)*
- *All areas located outside the defined Urban Development Area...and all areas designated as open space within the Urban Development Area...shall be retained as permanent open space. Ownership and management of such open space shall be through one or a combination of the following methods, as determined by the City Council: (a) dedication to a public agency...(or) (b) ownership and maintenance by community homeowners association. (Policy II.A.1, page 28)*
- *For applicable open space parcels that may remain in private ownership, an easement for the Bay Area Ridge Trail and related trail staging area shall be provided that complies with the standards and criteria of the public agency accepting these easements. (Policy II.A.3, page 29)*
- *A minimum 13-acre joint elementary school and local park site shall be dedicated to the Hayward Unified School District (HUSD) and the Hayward Area Recreation and Park District (HARD). The site, which shall consist of ten (10) acres for the school and three (3) acres for the park, shall be located at Hayward Boulevard with frontage on the entry/ridge drive... (Policy II.B.1.a, page 29)*

- *A second approximately 5-acre local park site shall be located within the development in the vicinity of the staging area for the Bay Area Ridge Trail with frontage on the entry/ridge drive. The required acreage for the park site shall not include any land encumbered by the PG&E easement. (Policy II.B.1.b, page 29)*
- *The right-of-way easement for the regional Bay Area Ridge Trail and a trail staging area shall be dedicated to a public agency. Said right-of-way shall generally conform to the alignment adopted by the Bay Area Ridge Trail Council... (Policy II.C.1.a, page 31)*
- *A hiking/riding trail shall also be provided along the entire property frontage of Fairview Avenue with a trail link provided from this trail to the Ridge Trail. A trailhead with a parking turn-out shall be provided along Fairview Avenue if excessive grading would not be required to accommodate this facility. (Policy II.C.1.b, page 31)*
- *A right-of-way or easement for public and service access from Hayward Boulevard to the north end of Garin Regional Park shall be dedicated to the East Bay Regional Park District, which shall generally follow the alignment of the existing access easement located in the canyon between the Hayward 1900 and Bailey properties... (Policy II.C.2, page 31)*

The project proposes amendments to Policies I.A.1, I.B.1.a, I.B.1.b, I.B.2.b, I.C, II.B.1.a, II.B.1.b, II.C.1.b, and II.C.2 to reflect the project as currently proposed. The proposed amendments are on file at the City of Hayward Department of Community and Economic Development.

2. PREVIOUS IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC AREA PLAN EIR

Table 7 summarizes pertinent land use impacts and mitigation measures identified in the previous 1991 Walpert Ridge Specific Area Plan EIR.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Significance Criteria

Based on the CEQA Guidelines, the current 650-unit Blue Rock Country Club project would generally be considered to have a significant land use impact if it would:

- (1) Conflict with the adopted environmental plans and goals of the community;¹

¹CEQA Guidelines, Appendix G, Item a, and Appendix I, Item I(b).

Table 7

1991 EIR LAND USE IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 units in the subarea within 1.5 miles of Fire Station No. 5¹ would convert up to 310 acres to urban use, requiring rezoning (from *Agricultural* to *Planned Development* or *Suburban Density*) and nonrenewal or cancellation of agricultural preserves. Approximately 2,100 acres could be dedicated as open space.

Development would be subject to General Plan policies calling for single-family detached housing on large lots (Suburban Residential Density--0.2-4.2 dwelling units per net acre), and policies concerning vegetation and wildlife, air quality, noise, transportation and circulation, urban design, and open space and recreation. Development of 700 or 900 units would fall below the housing capacity range specified in Policy Statement II of the Walpert Ridge Specific Area Plan.

Mitigation Summary

Change zoning from *Agricultural (A)* to *Planned Development (PD)* or *Suburban Density (RS)*.

Cancellation of agricultural preserves would require adoption of specific state-required findings by the Hayward City Council.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

¹ Note: The 1991 EIR describes the comparative impact and mitigation implications of a number of alternative development configurations for Walpert Ridge. The configuration alternative involving "the subarea within 1.5 miles of Fire Station No. 5" was selected by the Hayward City Council in its resolution certifying the 1991 EIR and adopting the 1991 Walpert Ridge Specific Area Plan, and therefore is the EIR alternative most representative of the current proposed 650-unit Blue Rock Country Club Project.

- (2) Disrupt or divide the physical arrangement of the established community;¹
- (3) Conflict with established recreational, educational, religious, or scientific uses of the area;²
- (4) Have a substantial, demonstrable negative aesthetic effect;³
- (5) Be incompatible with existing land use in the vicinity;⁴
- (6) Induce substantial growth or concentration of population either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure);⁵
- (7) Cumulatively exceed official regional or local population projections;⁶
- (8) Displace existing housing, especially affordable housing.⁷ or
- (9) Create a potential public health hazard or attract people to an area and expose them to hazards found there.⁸

b. Impacts and Mitigation Measures

NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.

(1) Onsite Land Use Impacts. The project would have the following impacts on land use conditions on the project site. (Please refer to sections IV.B, Visual Factors, and IV.G, Public Health and Safety, respectively, for discussion of the visual and potential health and safety impacts of the existing PG&E electrical transmission tower line on proposed project land uses.)

¹CEQA Guidelines, Appendix G, Item u, and Appendix I, Item I(e).

²CEQA Guidelines, Appendix G, Item w.

³CEQA Guidelines, Appendix G, Item b, and Appendix I, Item XIII(b).

⁴CEQA Guidelines, Appendix I, Item I(c).

⁵CEQA Guidelines, Appendix G, Item k, and Appendix I, Item II(b).

⁶CEQA Guidelines, Appendix I, Item II(a).

⁷CEQA Guidelines, Appendix I, Item II(c).

⁸CEQA Guidelines, Section 15126(a) and Appendix G, Item v.

Impact LU-1: Loss of Open Space. The project would result in the irreversible loss of approximately 574 acres of existing undeveloped ridgeline and hillside open space on the project site that currently has aesthetic, biotic, and agricultural values. The project would contribute to the cumulative loss of open space on Walpert Ridge, in greater Hayward, and in the East Bay hills. These effects would represent a **significant project and cumulative impact** (see Criteria #1 and #4 under "a. Significance Criteria" above).

The 574-acre total includes the 533.3 acres of urban uses listed in Table 2 (in section III, Project Description), plus the estimated 40.7 acres of (landscaped) open space to be maintained by the local homeowners' association. This total represents 263 more acres than the 310-acre area identified in the 1991 EIR for conversion to urban use (see Table 7). Loss of this open space would contribute to cumulative open space losses due to development on Walpert Ridge and elsewhere in Hayward (see Table 5).

The 574-acre total includes a portion of the proposed golf course that would be located outside the City's General Plan-designated *Urban Limit Line*. This aspect of the project has the potential to conflict with the "Open Space Framework" map contained in the *Growth Management Element*, which designates the portion of the project site located outside the *Urban Limit Line* as *Land to be Dedicated for Public Open Space in Connection with Development*.

The loss of open space due to the project would also result in impacts on other environmental conditions and resources, including transportation, water quality, and air quality. These impacts are described in subsequent sections of this SEIR (i.e., sections IV.B, C, D, F, and J).

Mitigation LU-1: Because new open space cannot feasibly be created to replace the open space that would be developed, no mitigation is available and the project-related net loss in open space would represent a **significant, unavoidable impact** of the project as proposed.

The applicant proposes to dedicate open space areas that would remain on the site after project development (approximately 1,000 acres, as shown in Table 2) to the East Bay Regional Park District or other public agency (see section III, Project Description). The applicant also intends to allow the East Bay Regional Park District to provide trail links through the project site for the Bay Area Ridge Trail and the Garin Regional Park connector trail. The project would provide a trail staging area at the proposed joint school/park site. These beneficial project aspects would partially offset the open space impact of the project, but would not reduce the impact to a less-than-significant level.

The project would require amendment of the "Open Space Framework" map of the General Plan *Growth Management Element* to allow golf course development in a portion of the area

located outside the *Urban Limit Line* that is designated as *Land to be Dedicated for Public Open Space in Connection with Development*.

Loss of Existing Onsite Housing Unit. With development of the proposed project, the currently unoccupied housing unit on the Roman Catholic Bishop of Oakland property may be removed. While this structure, if removed, would no longer be available for residential use, the project would compensate for the minor loss of housing stock through construction of low-density single-family housing, and would therefore have a ***less-than-significant impact*** on onsite housing (see Criterion #8 under "a. Significance Criteria" above).

As shown on the preliminary development plan for the project (see Figure 6), this housing unit is located immediately outside the currently proposed development area. It is nevertheless possible that the project would require demolition of this structure (e.g., to allow habitat restoration in this area).¹

Mitigation for Loss of Existing Onsite Housing Unit. No significant impact has been identified; no mitigation is required.

Impact LU-2: Relocation of Existing Onsite Regional Trail. The project proposes to relocate a portion of the existing Garin Park Trail that extends from Hayward Boulevard/Fairview Avenue along the western project site boundary to Garin Regional Park. This change could conflict with existing uses of this trail, representing a ***potentially significant impact***, if the final proposed trail alignment is not acceptable to the East Bay Regional Park District (EBRPD) (see Criteria #3 and #5 under "a. Significance Criteria" above).

As shown in Figure 9 in section III, Project Description, the project proposes to relocate the northern portion of the Garin Park Trail that currently extends along an existing fire road at the western edge of the project site. The project would provide a trail staging area (in the proposed joint school/park site) for access to this trail; this would represent a potentially beneficial effect of the project on the Garin Park Trail. (Please refer also to section IV.H.6, Public Services, "Parks and Recreation," for discussion of project impacts on EBRPD facilities.)

¹Lise Hinman, Hayward 1900, and Lori Wider, Sheppard, Mullin, Richter & Hampton; personal communication, July 25, 1997.

Mitigation LU-2: In addition to relocation of the Garin Park Trail and development of the trail staging area proposed by the project, require the applicant to (1) obtain written EBRPD approval of the final trail alignment, and (2) dedicate the trail easement to EBRPD. These measures would reduce the project's impact on the existing Garin Park Trail to a *less-than-significant level*.

Please refer also to section IV.H.6, Public Services, "Parks and Recreation," for additional mitigations for project impacts on EBRPD facilities.

Impact LU-3: Potential Conflicts Between Project Urban Uses and Remaining Onsite Open Space Uses. The project proposes residential and golf course development adjacent to areas proposed to be designated as *Open Space* and that may be used for cattle grazing. This juxtaposition of urban and agricultural (grazing) uses would create the potential for nuisance complaints (e.g., due to odors, dust, or noise from livestock and/or associated farm vehicles). This potential incompatibility represents a *potentially significant impact* (see Criteria #5 and #9 under "a. Significance Criteria" above).

As shown in Figure 8 in section III, Project Description, the northeastern and southern portions of the project site would be designated as *Open Space*; the applicant intends to dedicate these areas to the EBRPD or other public agency. An EBRPD representative has indicated that the EBRPD may use portions of these areas for cattle grazing.¹ Depending on the location of future grazing activity, the proximity of this activity to planned residential uses (proposed project Neighborhoods A and G--see Figure 6 in section III, Project Description) could result in nuisances for project occupants, including annoying odors, dust, or noise from livestock and/or associated farm vehicles. These nuisances may also affect the proposed onsite golf course (clubhouse, etc.). The location of urban uses close to grazing uses could also result in problems created by domestic pets harming or disturbing livestock, and other trespass or acts of vandalism.

Please refer to section IV.C, Vegetation and Wildlife, for discussion of project impacts on onsite vegetation and wildlife habitat values within designated *Open Space* areas.

¹Linda Chavez, Park Planner, East Bay Regional Park District; personal communication, June 11, 1997.

Mitigation LU-3: (1) With approval by the EBRPD or another public agency that may receive the proposed *Open Space* land dedication, require building setbacks, dense landscaping, and construction of fencing in Neighborhoods A and G and other portions of the project that would adjoin designated *Open Space* areas that may be used for cattle grazing; (2) discourage vandalism on *Open Space* lands by requiring the construction of adequate fencing surrounding affected *Open Space* lands (with EBRPD or other public agency approval) and by the installation of "No Trespassing" signs; (3) formally notify prospective buyers of lots or homes in the project in writing of the potential nuisances that can be anticipated from nearby grazing activity; and (4) require the homeowners association to enact and enforce a leash law to control dogs and minimize related impacts on local livestock grazing (presumably, City leash laws would also remain in effect). These measures would reduce the impact to a ***less-than-significant level***.

Setbacks of 300 feet or more between urban uses and grazing areas, if feasible, would be desirable. Dense rows of trees between project housing and grazing areas would also be useful to screen materials carried by the wind. These setbacks would also assist in reducing potential nuisances due to odors, dust, or noise caused by livestock or associated farm vehicles.

Impact LU-4: New Water Tank Impacts. The project would require construction of two new water tanks (with a total storage capacity of 2.3 million gallons) immediately northeast of proposed project Neighborhood G, where they could present problems for project residents due to their appearance and flooding potential. This would represent a ***potentially significant impact*** (see Criteria #4 and #9 under "a. Significance Criteria" above).

Figure 6 in section III, Project Description, shows the proposed location of the water tanks. Please refer to section IV.H.4 (Public Services, "Water Service") for further discussion of the required water tanks.

Mitigation LU-4: Include design criteria for water tanks in the proposed design guidelines for the project, and incorporate these recommended design features into future water tank development plans. The criteria should address factors such as location, topographic separation, grading, setbacks from other uses, architectural design, and landscape screening. To reduce the visual impacts of the water tank, trees should be planted, and if possible, earth berms created, to screen the water tank from view. The tank should be painted with a low-gloss paint in a color that blends with the natural environment. This measure would reduce the impact to a ***less-than-significant level***.

(2) Impacts on Surrounding Land Uses. The project would have the following impacts on land uses surrounding the project site.

Impact LU-5: Impacts on Adjacent Existing and Planned Residential Development.

The project site would be developed with detached single-family housing at higher densities than (a) existing residential development in the adjacent Prominence subdivision, and (b) planned or potential residential development on the adjacent Bailey and Carden properties. The appearance of the higher density project housing has the potential to alter the generally large-lot suburban residential character of the area, representing a **potentially significant impact** (see Criteria #2, #4, and #5 under "a. Significance Criteria" above).

The City of Hayward General Plan and the Walpert Ridge Specific Plan currently designate the portion of the project site within the *Urban Limit Line* for residential development as *Residential Suburban Density (1.0 to 4.3 units per net acre)*. The project proposes (1) a General Plan amendment to redesignate the portion of the project site within the *Urban Limit Line* as *Residential, Low Density (4.3 to 8.7 dwelling units per net acre)*, and (2) associated Specific Plan amendments to increase the housing allocation for the project site from the current maximum potential of 485 units¹ to 650 units, and to allow lot sizes varying from 5,000 to over 10,000 square feet (rather than the current minimum lot size of 9,000 square feet). If the project, including these proposed plan amendments, is approved, single-family housing would be constructed on the project site at a density of approximately 4.5 units per acre (i.e., 650 units on 145 acres--see Tables 2 and 3 in section III, Project Description). This density would exceed that of the existing adjacent Prominence subdivision (located immediately north of the project site across Hayward Boulevard/Fairview Avenue); this subdivision contains 152 units on approximately 61.2 acres, translating to a density of approximately 2.5 units per acre.² Project housing densities would also exceed those currently allowed on the Carden property, which adjoins the northwestern portion of the project site; and on the Bailey property, which adjoins the western boundary of the project site (see Figure 13); a current development application for the latter property proposes 135 housing units on 54 acres, for a density of approximately 2.5 units per acre.³

Section IV.B, Visual Factors, addresses the project's impact on views from Hayward Boulevard/Fairview Avenue and from other locations adjoining the project site.

¹The 485-unit total consists of the following maximum unit potentials allowed by the Walpert Ridge Specific Plan: (1) 453 units on the Hayward 1900 property, and (2) 32 units on the Roman Catholic Bishop of Oakland property. (See further explanation in section III, Project Description.)

²Jeanette Peck, Development Review Services Engineer, Department of Community and Economic Development, City of Hayward; personal communication, July 17, 1997.

³Ibid.

Mitigation LU-5: Implement mitigation measures identified in section IV.B, Visual Factors, of this SEIR to lessen the visual impact of the project on surrounding existing and planned residential areas. These measures would reduce the potential land use incompatibility associated with the proposed single-family density variations to a ***less-than-significant level***.

Impact LU-6: Impacts on Adjacent Regional Parks. The proposed residential and golf course development, and relocation of Garin Park Lane, could diminish the quality of the existing park experience for users of the East Bay Regional Park District's Garin Regional Park and Dry Creek Pioneer Regional Park, which adjoin the project site to the southwest, representing a ***potentially significant impact*** (see Criteria #3, #4, and #5 under "a. Significance Criteria" above).

As shown in Figures 5 and 6 in section III, Project Description, a portion of the proposed project golf course at the western boundary of the project site would adjoin the Garin Regional Park boundary; this portion of the golf course could be considered a "buffer" between the regional park and the project housing. The remainder of the project site immediately adjoining the regional park boundaries would be designated as *Open Space* and would either be (1) dedicated in perpetuity to the East Bay Regional Park District or another public interest agency, (2) deeded to the local homeowners' association, or (3) retained by Hayward 1900 as open space. Other developed areas of the project would be visible from certain vantage points within Garin Regional Park and Dry Creek Pioneer Regional Park, however. In addition, Garin Park Lane would be relocated to an area closer to the Garin Regional Park boundary. Garin Park Lane would serve as a trail and access road for emergency vehicles, golf course maintenance vehicles, and golf course green waste refuse trucks.

Urban development and the associated increase in human activity on the project site has the potential to diminish the overall quality of the park experience for users of Garin Regional Park and Dry Creek Pioneer Regional Park. (Please refer also to sections IV.B (Visual Factors), IV.C (Vegetation and Wildlife), IV.F (Drainage and Water Quality), and IV.H.6 (Public Services, Parks and Recreation), which also address project impacts on these regional parks.)

Mitigation LU-6: Require the applicant to identify an alternative access to the proposed golf course maintenance center, in consultation with City staff, that is located further away from the Garin Regional Park boundary. Implement mitigation measures identified in sections IV.B (Visual Factors), IV.C (Vegetation and Wildlife), IV.F (Drainage and Water Quality), and IV.H.6 (Public Services, Parks and Recreation). These measures would reduce the potential incompatibility between project urban uses and regional park uses to a *less-than-significant level*.

Impacts on Other Surrounding Open Space. With development of the project as proposed, most areas of the project site that adjoin existing offsite, non-regional park open space would be designated as *Open Space* and dedicated to the East Bay Regional Park District or another public interest agency. The one exception would be existing offsite open space on the Bailey property, which adjoins the project-proposed joint school/park site; however, the open space value of the Bailey property is limited, given its proximity to existing urban development and its anticipated conversion to urban use in accordance with the land use designations of the City of Hayward General Plan. The effect of the project on offsite open space resources would therefore be considered a *less-than-significant impact* (see Criteria #2, #3, #4, and #5 under "a. Significance Criteria" above).

Mitigation for Impacts on Other Surrounding Open Space. No significant impacts have been identified; no mitigation is required.

Impacts on Adjacent Housing Unit. With development of the proposed project, the currently unoccupied housing structure (the former Meincke residence) located on East Bay Regional Park District (EBRPD) property immediately west of the project site may not be useable as a housing unit. While this structure may no longer be available for residential use, the project would compensate for this minor loss of housing stock through construction of low-density single-family housing, and would therefore have a *less-than-significant impact* (see Criterion #8 under "a. Significance Criteria" above).

As shown on the preliminary development plan for the project (see Figure 6 in section III, Project Description), this housing unit is located immediately west of the project site boundary. While the housing structure would not be directly affected by currently proposed development, it may no longer be useable as a housing unit due to changes in access in the area (e.g., relocation of Garin Park Lane and its use as an emergency access and trail--see Figure 9 in section III, Project Description).

Please refer to section IV.K, Cultural Resources, for discussion of the historic significance of the former Meincke residence and related project impacts.

Impact LU-7: Impacts on Existing City Water Tank. The project would require relocation of water pipe and the access road for an existing City of Hayward water tank, located north of proposed project Neighborhood A. The existing water tank could also present problems for future project residents due to its appearance and flooding potential. These potential conflicts represent a ***potentially significant impact*** (see Criteria #4, #5, and #9 under "a. Significance Criteria" above).

The pipe and road access to the water tank, which currently extend off Fairview Avenue, are proposed to be relocated through Neighborhood A via the proposed project roadway network (see Figures 6 and 8 in section III, Project Description).

Mitigation LU-7: Require City of Hayward approval of relocation plans for the water tank pipe and access road. Include landscape design criteria for the area surrounding the water tank in the proposed design guidelines for the project similar to what has been described herein under *Mitigation LU-4*, and incorporate these recommended design features into future development plans for this portion of the project site. These measures would reduce this impact to a ***less-than-significant level***.

Impact LU-8: Impacts on PT&T and Hayward Police Department Communications Towers. The project would introduce urban (single-family residential, golf course, and water tank) development along the access road to the existing PT&T and City of Hayward Police Department communications towers, and would reserve sites for possible future telecommunications facilities in the tower area. These proposed new uses have the potential to interfere with existing communications operations, representing a ***potentially significant impact*** (see Criteria #3, #5, and #9 under "a. Significance Criteria" above).

Mitigation LU-8: Require written PT&T and City of Hayward Police Department approval of development plans for the proposed project water tanks, Neighborhood G improvements, and any necessary fencing and "No Trespassing" signage in the vicinity of the existing communications towers. This measure would reduce the impact to a ***less-than-significant level***.

Impact LU-9: Cumulative Development on Adjoining Open Space Lands. Extension of utility infrastructure to the project site and development of urban land uses on the project site would increase the viability and likelihood of future development on the adjoining 391-acre Bailey property and the nine-acre Carden property, as designated by the City of Hayward General Plan and Walpert Ridge Specific Plan. The resulting loss of open space would represent a **significant cumulative impact** of the project (see Criterion #4 under "a. Significance Criteria" above).

In the Land Use section of the 1991 EIR, the Carden property and portions of the Bailey property were included in the four development subareas (see Figure 1 in section I, Introduction). In the case of the currently proposed Blue Rock Country Club project, development on these adjoining properties would represent a "cumulative development" potential. The 1991 EIR did not discuss development on these properties as "cumulative development," since no specific development plans for the Walpert Ridge area were proposed at that time.

Mitigation LU-9: Because new open space cannot feasibly be created to replace adjoining open space that may be developed, no mitigation is available and the cumulative net loss in open space would represent a **significant, unavoidable impact** of the project as proposed.

(3) Citywide Land Use Impacts. The project would have the following implications for citywide land use considerations. (NOTE: Please refer to section IV.H, Public Services, for discussion of the project's proposed school, park, and golf course facilities and related impacts on citywide school and park/recreation service conditions.)

Impact on Physical Arrangement of Hayward Community. The project would generally represent realization of the planned urban development pattern in the Hayward hills area, which consists of predominantly single-family detached housing units and adjacent areas of open space, with urban (residential) development contained within the City's General Plan-designated *Urban Limit Line*. The project would therefore have a **less-than-significant impact** on Hayward's existing and planned urban configuration (see Criteria #1 and #2 under "a. Significance Criteria" above).

The City of Hayward General Plan and the Walpert Ridge Specific Plan currently designate the portion of the project site within the *Urban Limit Line* for residential development at a density of 1.0 to 4.3 units per net acre. In addition to single-family detached housing, the Specific Plan allows an elementary school, public and private park and recreational facilities, hiking/riding trails, and a trail staging area within the *Urban Limit Line*. The Specific Plan

allows "low-intensity recreational uses" outside the *Urban Limit Line*, subject to City Council approval. (See policies listed under subsection 1(e) above.)

The project proposes 650 single-family housing units, a joint elementary school/park site, private parks, and a tennis/swim facility within the *Urban Limit Line*, and an 18-hole golf course (including golf clubhouse) to be located partially outside the *Urban Limit Line*. The remaining, undeveloped portion of the project site (approximately 1,000 acres) would be retained as open space and dedicated in perpetuity to a public agency. This proposed land use pattern is generally consistent with the existing and planned physical arrangement of the Hayward hills area of the city. [Please refer to *Impact LU-1* above for discussion of the project's potential conflict with the General Plan Growth Management Element "Open Space Framework" map, and to *Impact LU-5* above for discussion of the impacts on surrounding land uses associated with the project-proposed General Plan amendment to redesignate a portion of the site as *Residential, Low Density* (4.3 to 8.7 dwelling units per net acre).]

Mitigation for Impact on Physical Arrangement of Hayward Community. No significant impacts have been identified; no mitigation is required.

Impact on Hayward Jobs/Housing Balance. The 650 housing units proposed by the project would assist the city in attaining a better balance between local jobs and local employed residents, in accordance with City of Hayward General Policies Plan policies. This would represent a ***less-than-significant (potentially beneficial) impact*** of the project (see Criterion #1 under "a. Significance Criteria" above).

As indicated in Table 4, Hayward contained fewer employed residents (55,800) than jobs (74,480) in 1995, based on Association of Bay Area Governments (ABAG) estimates. The project, which proposes 650 single-family detached housing units, would contribute toward an improved relationship between housing and job opportunities, by providing more housing opportunities for local workers. Based on an average of 1.35 employed residents per household projected by ABAG for the year 2000,¹ the project could be expected to generate approximately 878 employed residents. The elementary school, golf clubhouse, and swim/tennis club proposed by the project would also provide limited employment opportunities. The project would directly or indirectly provide more opportunity for people who hold jobs in Hayward to live in Hayward, which in turn would be expected to improve traffic, noise, and air quality conditions by decreasing the number of people commuting in and out of the city for work.

It is important to note that a simple numerical balance in the jobs/housing ratio does not necessarily indicate that all local workers will have a better opportunity to live in the same community. Other factors, such as the match between local job pay and local housing costs,

¹64,200 employed residents/47,570 households in 2000 = 1.35 employed residents per household.

and between job types and local residents' skills, also influence the degree of linkage between jobs and housing in a community. In general, however, the project would help to improve the balance between jobs and housing opportunities in Hayward, in accordance with General Policies Plan policies calling for the city to "*seek to maintain the current balance between housing and jobs in the Hayward area*" (City Image policies, Strategy 1, page II-16), and to "*achieve a balance between the local employment base and the housing supply*" (Housing and Neighborhood Preservation policies, Strategy 1, page IV-19).

Mitigation for Impact on Hayward Jobs/Housing Balance. No significant impacts have been identified; no mitigation is required.

Impact LU-10: Population Increase Exceeding Regional Projections. The project would cause local population to exceed official regional population projections. This population increase would represent a *potentially significant impact* (see Criterion #7 under "a. Significance Criteria" above).

The Association of Bay Area Governments (ABAG) produces the official population projections for the region.¹ The projections are based on local government land use policies, such as general plans. The City of Hayward General Plan currently designates the site as *Residential, Suburban Density (1.0-4.3 units per net acre)*, and the Walpert Ridge Specific Plan limits urban development in the Walpert Ridge area (consisting of the project site and surrounding properties) to 575 single-family detached housing units (500 units plus an additional 15-percent density bonus (75 units)) (see policies listed under subsection 1(e) above). Of this 575-unit total, 445 units are allocated to the project site (413 units on the Hayward 1900 property and 32 units on the Roman Catholic Bishop of Oakland property).

The project proposes to: (1) amend of the General Plan to change the land use designation of the portion of the project site within the *Urban Limit Line* from *Residential, Suburban Density* to *Residential, Low Density (4.3 to 8.7 units per net acre)*; and (2) amend the Walpert Ridge Specific Plan to increase the housing allocation for the project site to 650 units. This proposed additional 205-unit increment of development on the project site (i.e., the difference between the existing 445-unit allocation and the proposed 650-unit allocation) was not assumed by ABAG in preparing Projections 96. Assuming the project is approved and construction begins in 1998, the project would thereby create the potential for Hayward's population to exceed ABAG's regional population projections for the 2000-2015 period.

The 205-unit additional increment of development could be expected to produce a population of approximately 603 persons, based on the Association of Bay Area Governments estimate

¹ Association of Bay Area Governments (ABAG), Projections 96, December 1995.

of 2.94 persons per household for the Hayward area in the year 2000.¹ This additional 603-person increment represents approximately 0.5 percent of Hayward's estimated 1995 population of 129,500 persons (see Table 4). Subsequent sections of this SEIR describe potentially significant traffic, public services, noise, air quality and other impacts associated with project-related population increases on the project site.

Mitigation LU-10: Mitigations identified in sections IV.D (Transportation), IV.H (Public Services), IV.I (Noise), and IV.J (Air Quality) would reduce environmental impacts associated with the project-related population increase to a ***less-than-significant level***. If the general plan and specific plan amendments proposed by the project are approved, the additional project-related population increase above the population increase associated with 1995 Walpert Ridge Specific Plan-allocated development would eventually be reflected in subsequent ABAG projections, which are based in part on local government land use policies such as general plans.

Impact on Regional Housing Needs. The project would assist the City in complying with regional housing need determinations. This would represent a ***less-than-significant (potentially beneficial) impact*** (see Criterion #1 under "a. Significance Criteria" above).

The project proposes a total of 650 housing units, consisting of 47 units on minimum 5,000-square-foot lots, 271 units on minimum 5,500-square-foot lots, 203 units on minimum 6,000-square-foot lots, 19 units on minimum 7,000-square-foot lots, 76 units on minimum 7,500-square-foot lots, 16 units on minimum 8,000-square-foot lots, and 18 units on lots of 10,000 square feet or more (see Table 2 in section III, Project Description). In general terms, the project as proposed would provide a range of housing types and, presumably, corresponding affordability levels. Based on the income categories cited in the "Setting" subsection above, the 650 housing units proposed by the project would be likely to be affordable to households in the above moderate-income category, due in part to their desirable ridgetop location. As indicated by Table 6, the City estimates that an additional 1,489 units² are needed in order to meet its adjusted target in this category. The project would assist the City in meeting this target.

Mitigation for Impact on Regional Housing Needs. No significant impact has been identified; no mitigation is required.

¹ Association of Bay Area Governments, Projections 96, page 122.

² 2,586 units (adjusted housing target for above moderate-income category) minus 1,097 units (number of above moderate-income units constructed from 1988 to 1996) = 1,489 units.

B. VISUAL FACTORS

The following SEIR section describes the local visual setting, project impacts on that setting, and mitigation measures warranted to address identified significant adverse visual impacts.

1. SETTING

a. Visual Character of Project Site and Vicinity

(1) Existing Visual Setting. As illustrated on Figure 3, the 1,635-acre project site is located along the upper reaches and crest of the Walpert Ridge portion of the Hayward Hills. The Hayward Hills are a distinctive range of predominantly undeveloped, northwest-trending upper hillsides and ridges that rise from the East Bay Plain. The ridges separate the predominantly urbanized Bay Plain areas of Hayward, Castro Valley, San Lorenzo, and Union City from the rural inland areas between the Bay Plain and Pleasanton--i.e, Palomares Canyon, Sunol Ridge, and Pleasanton Ridge.

(2) Existing and Anticipated Urban Development in the Walpert Ridge Vicinity. As illustrated on Figures 4, 5, and 13, the project site vicinity is surrounded primarily by undeveloped ridgeline open space, including the western ridgetops of Palomares Canyon to the east, the Dry Creek Pioneer Regional Park and other open space lands to the south, and Garin Regional Park to the west. The closest existing urbanization includes the new 153-unit Prominence subdivision located on the opposite side of Hayward Boulevard and Fairview Avenue immediately to the west; older, more established residential neighborhoods along Hayward Boulevard further to the west; and lower density residential development along Fairview Avenue to the north.

b. Onsite Visual Features

(1) Natural Features. As illustrated on Figures 4 and 5, the project site comprises a large portion of Walpert Ridge, and ranges in elevation between approximately 800 feet to over 1,500 feet. In addition to the main, northwest-trending ridge, the hill range within and surrounding the project site includes a number of secondary, generally southwest-trending ridges at lower elevations. Slope gradients on the project site range from zero to 75 percent. The smooth hill forms and topographic regularity of Walpert Ridge, in combination with its existing vegetative cover of rolling grassland and oak woodland, give the ridge area its distinct and valued visual character.

The crest of Walpert Ridge within the project site has been heavily grazed over the years and is now covered primarily by closely-cropped, non-native annual grasses that clearly convey the underlying, topographic form. The smoothly rounded, "loaf" shape of the main ridge is further enhanced by the apparent stability of site soils and lack of visible depressions (landslides and slumps). The homogeneity of the crest and upper slopes of Walpert Ridge reinforces its role as part of the Hayward Hills edge visible from medium- and long-range vantage points to the west.

The secondary ridges of the site are generally characterized by steeper slopes (up to 75 percent), and a vegetative cover of oak woodland, coastal scrub, and grass, with denser riparian associations located in the drainage bottoms (see Figures 4 and C-1). The dark oak forest contrasts with the light annual grasses along the hillsides and ridgetops, especially in the dry season.

Sensitive Visual Features. The "development area" of Walpert Ridge (the area within the City-designated *Urban Limit Line*) comprises approximately 340 acres of primarily grassy ridgetand located within 1.5 miles of Hayward Fire Department Station #5. Key topographic and visual features within this area are mapped on Figure 16. The main and secondary ridges are separated by heavily vegetated deep valleys and drainage swales.

The regular and homogeneous character of the area's topography emphasizes a few contrasting visual features. Various **tree groupings** provide the most contrasting visual elements, especially the stands of eucalyptus. The intervals between these features along the ridge are irregular, but are everywhere at least several hundred feet. This open spacing of tree stands provides a sense of scale and expanse along the ridgetop.

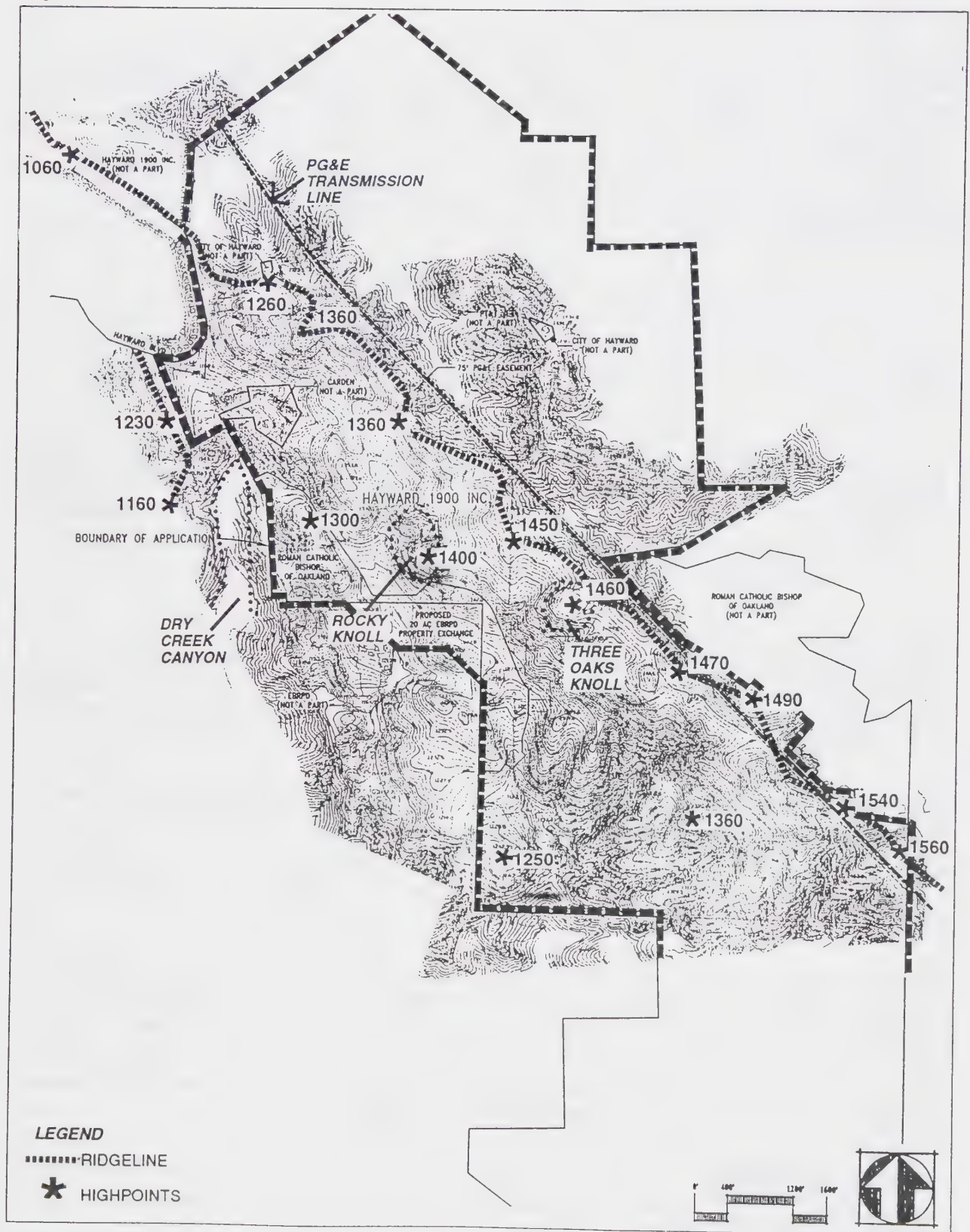
The boundary of the development area is largely defined by the edge of the **oak woodland**, which also generally corresponds to where slopes begin to exceed 25 percent. Scattered stands of coast live oak, California bay, and eucalyptus occur at various locations within the development area. Coastal scrub, primarily coyote brush, is also evident on many slopes that border the development area.

Several **visually distinctive knolls** are located within or near the development area, as shown on Figure 16, including "Rocky Knoll," and "Three Oaks Knoll." As explained in other sections of this SEIR, these knolls are also important for archaeological and other environmental reasons. In general, the higher portions of the landform are the most visually sensitive, but are also described in the Specific Plan as "the most readily developable portions of the site" in terms of slope, soil stability, and scenic views.

The underlying bedrock is exposed in many areas of the site, creating distinctive, picturesque **rock outcrops** within the urban development area. The largest rock outcrop grouping is identified as the "Rocky Knoll" on Figure 16.

Figure 16

Onsite Visual Features



SOURCE: Wagstaff and Associates.
Topography: Carlson, Burbee & Gibson, Inc.

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Wagstaff and Associates • Urban and Environmental Planners

(2) Onsite Electrical Transmission Lines and Microwave Towers. The most noticeable manmade structures onsite are the towers and lines within the PG&E electrical transmission line easement, which extends through the central portion of the site, approximately following the axis of the main ridge. The tower line's lattice steel structures are visually permeable, but nevertheless, intrusive elements in the predominantly open landscape.

The northeastern portion of the project site contains two microwave towers, one owned by Pacific Telephone and Telegraph (PT&T) and the other owned by the City of Hayward Police Department. These towers are located at approximately the 1,500-foot elevation and are visible from various on- and off-site locations.

(3) Other Onsite Manmade Visual Features. Other visible manmade features on the project site include unoccupied woodframe farm buildings and fences. An unoccupied house and associated ranch structures are located in the southwestern portion of the Roman Catholic Bishop of Oakland property.

(4) Onsite Views. The crest of Walpert Ridge provides panoramic views to the west and east. Views to the west include the East Bay Plain (from Fremont to Oakland), San Francisco Bay, the San Francisco Peninsula, and San Francisco. The most northerly visible feature is Mount Tamalpais. Views to the east include Mount Diablo, and in the middleground and foreground include the wooded slopes and grassy ridges of Palomares Canyon.

c. Overall Site Visibility and Visual Sensitivity

(1) Landscape Components. For visual impact analysis purposes, the 1991 Walpert Ridge Specific Plan EIR considered the Walpert Ridge site in terms of its two basic landscape components: the *ridgeline*; and the *upper hill faces*. The ridgeline consists of the main northwest trending ridge. The hill faces consist of the rounded shoulders of the main and secondary ridges that form the transition between the main ridge and the more steeply pitched lower slopes and ravines of the site.

From vantage points below the site, the site ridgeline appears as a distinctive view edge or natural skyline, with occasional tree groupings and rock outcrops, which is particularly sensitive visually (i.e., vulnerable to visual impacts; see photo 5). The vegetative cover of the upper hill faces consists almost entirely of closely-cropped grasses that emphasize the underlying topography and are also particularly sensitive visually (i.e., vulnerable to visual impacts if developed) (see photos 2a, 2b, 3a, 3b, and 4).

(2) Short-Range Views. Within a two-mile radius of the project site, views of Walpert Ridge are limited by intervening topography, vegetation, and urban development. In Hayward, east of the site, views of Walpert Ridge from Mission Boulevard and points up to a mile west of Mission Boulevard are obscured by steeply-sloping, intervening foothills aligned roughly parallel to Mission Boulevard (see photo 6). However, local views are available from several

vantage points along public roadways and on public and private lands above Mission Boulevard.

Many of these higher-elevation, short-range viewpoints provide sweeping views unobstructed by intervening terrain, structures, or vegetation. Such short-range views of portions of the project site are available in both directions along the Fairview Avenue approaches to the site (approximately between Fire Station #5 at Skyline Drive and China Court; see photos 2a, 2b and 2c); from trails, knolls and peaks in the adjacent Garin Regional Park (see photos 3a and 3b); and from the Ridge Loop Trail in Dry Creek Pioneer Regional Park.

(3) Middle-Range Views. At distances within a two- to five-mile radius from the project site ridge crest (i.e., "middle-range" views), Walpert Ridge and its secondary ridges and hillsides are visible from many locations at lower elevations (less than 100 feet) east of the site along the East Bay Plain, including locations in Hayward, Castro Valley, San Lorenzo, and Union City. In particular, open and unobstructed views of Walpert Ridge are available from various subregional arterials along the Bay Plain, including focal views (straight-on vistas) from east-west oriented segments of Tennyson Road and Industrial Parkway in Hayward and Decoto Road in Union City, and side views from segments of Alvarado-Niles Road in Union City east and west of Decoto Road. Unobstructed middle-range views of the ridge are also available from segments of Interstate 880 (the Nimitz Freeway) between the Industrial Parkway and Alvarado-Niles Road interchanges.

Most of these medium-range views of Walpert Ridge occur at distances of greater than 3.5 miles from the crest of the ridge. At points in the Bay Plain closer than 3.5 miles, views are generally obscured by steeply-sloping, intervening foothills (see photo 6). Similarly, on the opposite, east side of the ridge, views of the project site from Palomares Canyon Road are obscured by steeply-sloping, intervening foothills.

In these middle-range views, Walpert Ridge is recognizable in the distance, above extensive intervening urbanization, as a discrete, expansive, northwest-trending, smooth, grassland ridgeline, occasionally accented by isolated stands of oak woodland. From these easterly viewpoints, views of the hillside immediately below the ridge include medium-density residential development and the buildings and landscaping of the California State University-Hayward campus (particularly, the 10-story Warren Hall structure), off of upper Hayward Boulevard.

(3) Long Range Views. At distances of five miles or greater from the project site, including vantage points on San Francisco Bay and in mid-Peninsula cities across the Bay, Walpert Ridge is visible as a distant ridgeline backdrop to the urbanized East Bay Plain. From these distant westerly vantage points, the ridge is visible as a relatively featureless, uniform, elongated plain that defines the eastern horizon.

d. Representative Offsite Vantage Points

Figures 17 and 18 map the location of eight vantage points from which photographs are provided on the following pages to illustrate project site visibility. This combination of vantage points has been selected as representative of the overall degree of project site visibility and sensitivity from short-, middle-, and long-range viewpoints. The selected vantage points are described below.

(1) Hayward Boulevard. (See photo 1.) From this vantage point looking southeast from the intersection of Hayward Boulevard and Skyline Drive, views of Walpert Ridge and the project site are obscured by the intervening knoll.

(2) Fairview Avenue. (See photos 2a, 2b, and 2c.) The northern end of the project site fronts on the east side of Fairview Avenue, opposite the existing Prominence subdivision. The undeveloped hill forms of the project site are directly visible in the immediate foreground (see photos 2a, and 2b).

From segments of Fairview Avenue farther north of the project site (i.e., north of Arbutus Court), most of the site is obscured from view by intervening vegetation and topography. However, portions of the northernmost, secondary ridges of the project site are visible in the southbound view from segments of Fairview between Arbutus and East Avenue (see photo 2c).

(3) Garin Regional Park. (See photos 3a and 3b.) Central portions of the project site are prominent in sweeping views from a number of locations in the adjacent Garin Regional Park, including Vista Peak (elevation: 934 feet) and Garin Peak (elevation: 948 feet), which are approximately 1.3 miles from the western edge of the project site. The southwestern portion of the site is directly visible from the closest segments of the Ridge Loop Trail (photo 3a) and from the high knoll along the northwest edge of the project site (elevation: 1,200 feet; photo 3b).

(4) East Bay Plain. (See photo 4.) As described above, middle- and long-range views of Walpert Ridge horizon are available from many points in the East Bay Plain, generally at a distance of 3.5 miles or greater from the crest of the ridge, including locations in Hayward, Castro Valley, San Lorenzo, and Union City. Photo 4 shows the view towards Walpert Ridge from the El Mercado Shopping Center on Alvarado-Niles Road at Decoto Road in Union City, approximately 4.5 miles from the crest of the ridge.

Figure 17

Immediate Viewpoint Map

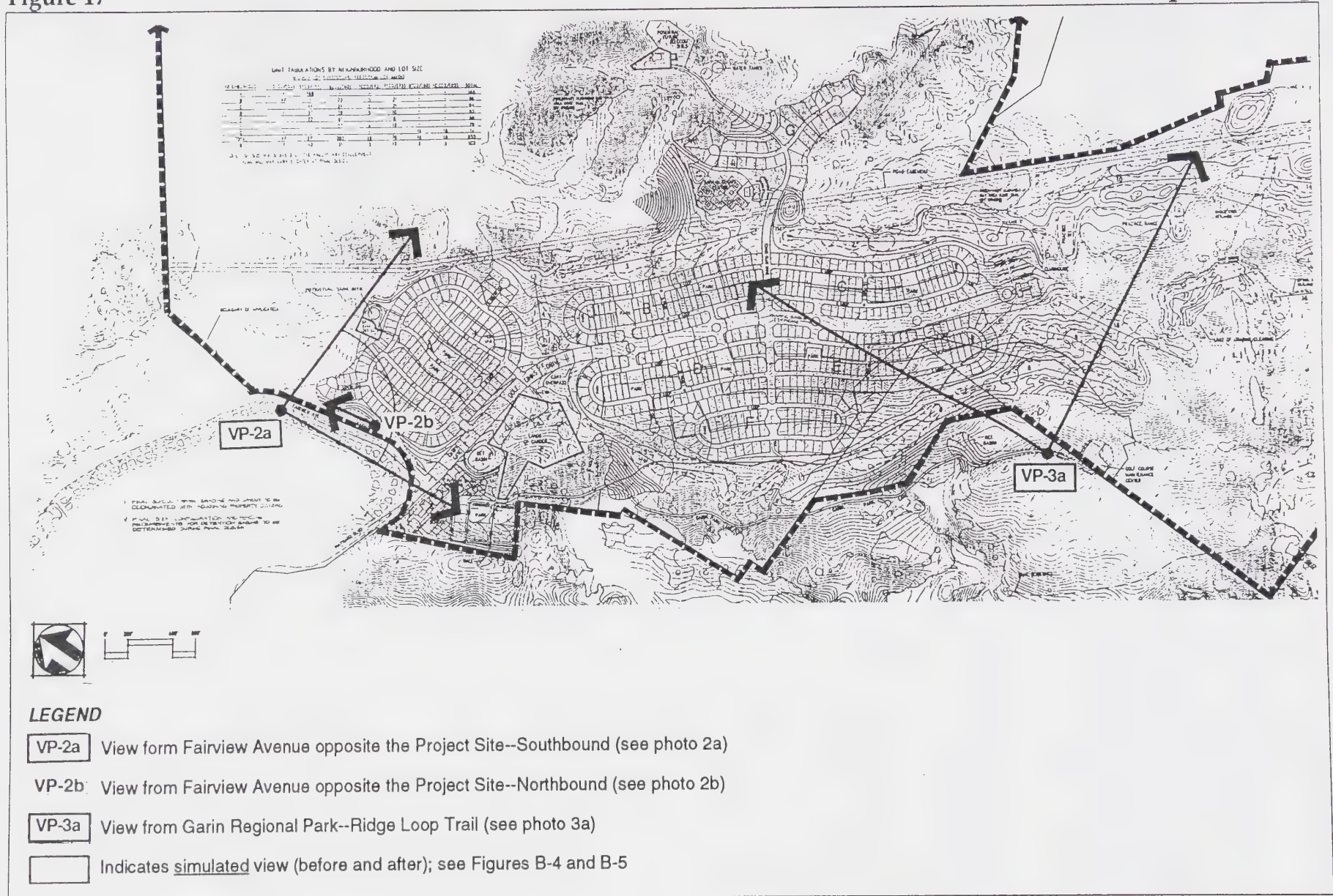
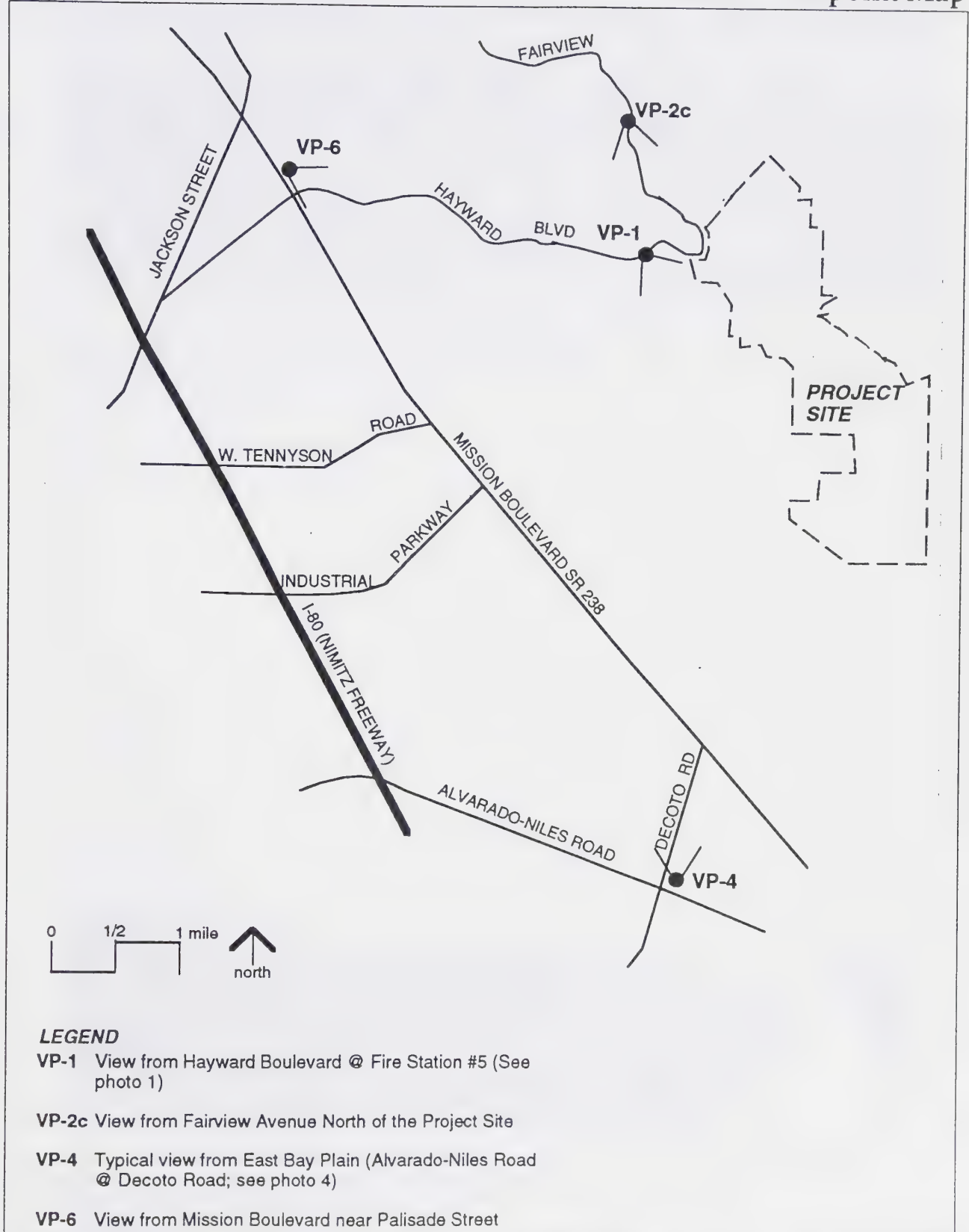


Figure 18

Distant Viewpoint Map





1. View from Hayward Boulevard @ Fire Station #5. From this vantage point looking southeast in the direction of the project site from the intersection of Hayward Boulevard and Skyline Drive (Hayward Fire Department Station #5 on the right), Walpert Ridge and the project site are obscured by the intervening knoll.



2a. View from Fairview Avenue Opposite the Project Site--Southbound. From this vantage point looking in the southeast direction along Fairview Avenue, the northern end of the project site and its undeveloped hill forms front the left (east) side of the roadway. The Prominence subdivision is on the west side.



2b. View from Fairview Avenue Opposite the Project Site--Northbound. This viewpoint location is similar to viewpoint (2a), but shows the opposite, northbound view (undeveloped project site on the right; Prominence subdivision on the left). (Note: City of Hayward 1,285-gallon water tank to the right, which is located on the northerly portion of the project site; see section IV.H.4--"Public Services; 4. Water.")



2c. View from Fairview Avenue North of the Project Site. Although most of the project site is not visible from Fairview Avenue north of the site (north of Arbutus Court) due to intervening topography and vegetation, portions of the site (its northernmost, secondary ridges) are visible from segments of Fairview between the site and East Avenue.



3a. View from Garin Regional Park--Ridge Loop Trail. Sweeping views of the central-southwest portion of the project site are available from various locations in Garin Regional Park, including this point on the Ridge Loop Trail near the western edge of the project.



3b. View from Garin Regional Park--High Knoll. The high knoll (approximate elevation: 1,200 feet) immediately west of the project site in Garin Regional Park provides a more elevated, sweeping view of the central-southwest portion of the project site.



4. **Typical View from East Bay Plain (Alvarado-Niles Road).** This view of Walpert Ridge from the El Mercado Shopping Center on Alvarado-Niles Road in Union City (at Decoto Road), approximately 4.5 miles from the crest of the ridge, illustrates the role of the ridge horizon as a visual backdrop to the East Bay Plain.



5. **Rocky Knoll.** View looking northeast towards existing Rocky Knoll (see Figure B-1) from edge of 20-acre EBMUD property (existing access road to the EBRPD property is visible on the left).



6. **View from Mission Boulevard near Palisade Street.** Views of Walpert Ridge from most "short-range" vantage points within a two-mile radius of the project site are obscured by intervening topography, vegetation, and urban development.

2. RELEVANT CITY OF HAYWARD PLANS AND POLICIES

The City of Hayward General Policies Plan, as adopted by the City in May 1986 and amended through July 1993, contains a number of general policies pertaining to such visual factors as open space, open space continuity ridges, canyons, natural topography hill contours, and natural vegetation that apply citywide. To implement some of these general policies, the City in February 1993 adopted a set of Hillside Design Guidelines for application to Hayward hills development as a means of promoting design quality and the protection of visual values. Subsequently, in July 1996, the City adopted the Walpert Ridge Specific Plan, which contains a combination of policies that, among other things, sets forth more specific design standards and guidelines for urban development on Walpert Ridge. The Specific Plan represents a flexible interpretation, rather than a strict adherence to the related General Plan policies and Hillside Design Guidelines.

Adopted General Policies Plan, Hillside Design Guidelines, and Walpert Ridge Specific Plan policies and guidelines that pertain to the visual aspects of the proposed project are identified and described below. It should be noted that the Hillside Design Guidelines included the provision that "where a Specific Plan will be prepared for a development area, the City Council may choose to include detailed plans, precise development standards, and for design guidelines in the Specific Plan that will supersede all or a portion of these Guidelines." Based on this provision, only those Hillside Design Guidelines that do not appear to have been superseded by Walpert Ridge Specific Plan policies have been considered in this SEIR.

a. City of Hayward General Policies Plan

Pertinent City of Hayward General Policies Plan policies regarding visual factors are described below:

- *Retain fingers of open space to define the ridges and canyons and connect open hill spaces to the Bay Plain. (General Policies Plan, City Image policies, Strategy 7, page II-15)*
- *Require hill development to respect natural contours and to blend with natural vegetation. (General Policies Plan, City Image policies, Strategy 7, page II-15)*
- *Restrict the amount of impervious coverage (buildings, structure, and paving) in open space areas in order to retain its character. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 5, page VII-13)*
- *Seek clustering of development which maintains continuity of open space. (General Policies Plan, Open Space, Parks and Recreation policies, Strategy 6, page VII-14)*

b. City of Hayward Design Guidelines

The City has adopted a set of design guidelines for various land uses including residential development (City of Hayward Design Guidelines, adopted November, 1993). One of the key

design themes promoted in the guidelines is the concept of clustering development in order to maintain open space continuity. For hillside development, the Design Guidelines refer to the city-adopted separate set of Hillside Design and Urban/Wildland Interface Guidelines, which are described below.

c. City of Hayward Hillside Design Guidelines

In February 1993, the City adopted a comprehensive set of design guidelines for "all proposed development located in the Hayward Hills" (City of Hayward Hillside Design and Urban/Wildland Interface Guidelines). In addition to the goals of fire defensibility and access, the guidelines promote architectural, landscape, and site design quality, and the preservation of significant natural resource values in the hills. With respect to *development on or near ridgelines*, the guidelines call for the following:

- the blending of homes into the topography to minimize visual disturbance of the ridgeline and to panoramic views (Guidelines page 4);
- proper placement of homes and the avoidance of rows of homes on ridgelines (page 4);
- the placement of larger lots along ridgelines to allow for "view corridors" (page 4);
- the use of low building profiles and roof pitches compatible with slopes (page 4);
- grouping of single-family hillside homes into groups of 8 to 12 units (page 5);
- development clustering to preserve significant natural features (rock outcroppings, woodland and riparian vegetation, and scenic views (page 5);
- architectural designs, materials, and colors that provide a smooth visual transition between project homes and natural surroundings (page 6);
- fencing controls to avoid visual interruption of natural open areas and views (page 8),
- grading controls to: (a) minimize grading and blend cut and fill slopes with the existing slope (top and bottom rounding); (b) create a natural appearance (page 9); (c) prevent removal or disturbance of "significant vegetation, rock outcroppings, or "other important natural features"; and (d) avoid grading in "visually sensitive" areas (page 4);
- use of residential building designs that limit grading and alterations to the natural terrain (page 11);
- avoidance of "grading to create flat usable open space" (page 11); and
- landscaping measures to: (a) minimize the visual impacts of structures and graded slopes, "especially where the development abuts open space areas or is located on ridgelines or on highly visible hill faces"; (b) create informal, natural-appearing plantings; and (c) preserve existing natural vegetation "as much as possible."

d. Walpert Ridge Specific Plan

The Walpert Ridge Specific Plan includes an extensive combination of policies that have been formulated all or in part to implement the General Plan policies and Hillside Design Guidelines listed above, maximize project compatibility with onsite visual values, and minimize project impacts on offsite views of Walpert Ridge. Most of the General Plan and Hillside Design Guidelines listed above relevant to the potential visual impacts of Walpert Ridge development are reflected or have been expanded upon in the adopted Specific Plan. However, the Specific Plan represents a more flexible, more discretionary interpretation of, rather than a strict adherence to, the related General Plan policies and Hillside Design Guidelines ("To the extent feasible..." etc.). The Specific Plan includes policies that address the following design aspects:

- lot size and lot grading;
- preservation of important sensitive visual features, including Rocky Knoll, Bay Trees Knoll, Three Oaks Knoll, and Dry Creek Canyon;
- provision of attractive landscaped frontages;
- provision of adequate landscape buffering around required new water tanks;
- provision of planter strips between sidewalk and curb on all streets;
- street lighting design measures to minimize nighttime visual impacts, achieve design consistency, reduce glare and spillover, and maintain pedestrian scales, in pedestrian areas;
- architectural design measures to preserve special lot features (e.g., trees and rock outcroppings), minimize perceived residential building height and bulk on sloping lots, achieve sub-neighborhood architectural design consistency (materials, colors, detailing), avoid large visible wall surfaces (especially on downhill elevations), avoid large cantilevered decks, encourage pitched or gabled roofs that follow slopes, avoid long unbroken rooflines, encourage colors and materials that "blend with...the natural setting," and avoid highly reflective roof materials;
- fence and wall design controls to achieve a common, "quality" design along public rights-of-way with materials that blend well with the natural setting; avoid long continuous fences or walls along public streets; and avoid solid privacy fences in the middle of transition slope areas;
- landscape design requirements for each individual development that include preparation of a "comprehensive landscape master plan" to address such items as street tree plantings, landscaping of transitional areas between development and open space, landscaping of large graded slopes, emphasis on indigenous plants, and landscape maintenance responsibilities;
- landscape planting to screen water tanks and other above ground infrastructure from public view; and

- grading standards, guidelines, and requirements that conform with the City's Hillside Design Guidelines (see below), control the maximum vertical height of cut and fill slopes (cuts are limited to 35 feet in vertical height), control the degree of lot padding, protect oak woodland, and require use of "landform grading techniques" (variable slope grades, undulating slopes, swales, curvilinear drainage ditches, informal "landform landscaping," generous top and bottom rounding) particularly for slopes visible from Hayward Boulevard, Fairview Avenue, Garin Regional Park, Bay Ridge Trail, and surrounding residential areas.

The project applicant is proposing some specific amendments to these specific plan policies, including increases to flexibility to provide for the project design (see bold and underlined type on page 154 of this SEIR section).

3. PREVIOUS IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC PLAN EIR

Impact and mitigation findings from the certified 1991 Walpert Ridge Specific Plan EIR for a comparable project scenario that *continue to apply* to the currently proposed 650-unit Blue Rock Country Club Project are described below and summarized in Table 8.

a. Previous Impacts

(1) General Visual Effects. The project would extend residential uses from their present edge at the Fairview Avenue/Hayward Avenue loop. Structures, roadways, and other infrastructure elements and landscaping would now occur over the northerly portion of Walpert Ridge. Homes would probably be sited on and just below the main crest of Walpert Ridge. Due to their relatively large size, these structures are likely to have substantial profiles, increasing their potential visibility. The ridgeline is the most visually sensitive component of Walpert Ridge due to the potential for silhouette effects.

As a continuation of an existing urban feature (the Prominence subdivision), the development would appear to be less intrusive than if it appeared to be discontinuous from existing development and surrounded by the existing natural setting. Moreover, concentrating development on the northerly portion of the upper ridge would preserve the remaining, larger area of the ridge from the visual effects of urbanization.

(2) Impacts on Short-Range Views. In short-range views, the adverse silhouette effects of project development on the ridgeline would be pronounced. The project would probably occupy a substantial section of the ridge crest and upper hill face area. "Seen as individual silhouettes, or a more-or-less continuous, massed silhouette, residential structures would obscure the existing visual pattern of the ridge and stand out in relief as angular, solid figures against the background of the sky." "Potential visual effects would include loss of important ridgeline features...the existing visual balance of ridgeline features would be disturbed."

Table 8

1991 EIR VISUAL IMPACT AND MITIGATION FINDINGS

Impact Summary

Residential development would be visible in long-range, medium-range, and short-range views as an extension of urban uses and forms into the existing natural setting. Determination of the magnitude of the visual effects of development would require review of the site plans and development programs of specific proposals. In general, aesthetic trade-offs between concentrating and dispersing development would have to be considered in evaluating significant effects.

Within 1.5 miles of Fire Station No. 5, development of 700 or 900 housing units would increase potential massing and silhouette effects in easterly views (compared with development in other alternative subareas), because development would be concentrated within the smallest area and outside the easterly ridge area. Preservation of visually important existing natural features within the development area would be most difficult in this geographic distribution (subarea). Development in this subarea would result in the highest percentage of the total site remaining as open space.

Development of 900 housing units in this subarea would have the highest gross density (of all the development alternatives), and thus the greatest potential for spatially concentrated massing and barrier effects.

Mitigation Summary

Implement Hayward General Policies Plan policies to preserve existing topography, vegetation, rock outcroppings and other important existing natural features of the main ridge crest and upper hill faces of Walpert Ridge through site plan review. Restrict development (including building heights and landscaping) on visually sensitive areas of the main ridge crest and upper hill faces. Promote clustering of development and use of existing terrain to screen development. Encourage development alternatives that retain substantial sections of Walpert Ridge as open space.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

(3) Impacts on Middle-Range and Long-Range Views. In easterly views from Bay Plain vantage points over five miles away, individual houses would not be readily discernible. Under certain lighting conditions, such as low-angle, late afternoon sunlight, spot reflections from individual house windows might occur.

The aggregate of development on the Walpert Ridge crest, including landscaping, roadways, and fencing, as well as structures, would be visible, as is currently the existing development north of the Fairview Avenue/Hayward Boulevard loop, and would contribute to the cumulative adverse visual effects of urban development in the Hayward hills. The project development on the ridge would appear as a homogeneous band superimposed on the flat plain of the upper ridge, extending another mile into the existing natural setting.

b. Previous Mitigations

The 1991 EIR included a list of visual impact mitigation measures based on policies and strategies set forth in the Hayward General Policies Plan. These 1991 EIR measures, which would continue to apply to the currently proposed Blue Rock Country Club project, are summarized below:

- Limit structure locations that exceed the elevation of the main ridge crest to areas where existing topographic features will screen these areas from view.
- Also apply this mitigation to other ridgeline areas such as the "Oak Knoll," that are prominent in easterly views of Walpert Ridge.
- These measures could be implemented by:
 - prohibiting development within 50 feet in elevation of the main ridge crest,
 - requiring that the finished elevation of rooftops be below the elevation of the main ridge crest,
 - limiting building heights on or in the vicinity of the main ridge crest to one story with a maximum building height of 18 feet,
 - permitting development at higher elevations on the easterly slopes of the main ridge crest and on secondary ridges extending into Palomares Canyon,
 - applying some combination of these and other similar measures that are "responsive to variations in [the] visual sensitivity of different sections of the ridge crest."
- For housing on the hill faces, make use of existing topographic features to screen development from important viewpoints. Permit clustering to increase densities in areas where terrain screening is feasible.
- Minimize disturbance of existing terrain and vegetation. Encourage site plans to reduce grading of existing slopes.

- Avoid creation of monotonous linear elements or series of linear elements ("steps"); break-up or relieve tendencies toward linearity of home siting; vary structure and facade orientation.
- Avoid landscaping on the main ridge crests and upper hill faces; encourage planting of native trees (coast live oak).
- Limit building heights to 35 feet on the upper ridge and hill faces.

4. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Methodology

The specific visual impacts of the 650-unit Blue Rock Country Club project, and associated mitigation needs, are identified below. Impact or mitigation finding from the previous 1991 Specific Plan EIR that continue to apply to the current project are reiterated, and various additional (supplemental) impact or mitigation findings are identified.

b. Significance Criteria

Based on Appendix G of the current CEQA Guidelines, the project would be considered in this SEIR to have a *significant visual* impact if it would:

- (1) Conflict with latest applicable environmental plans or policies adopted by agencies with jurisdiction over the project (i.e., if it would be inconsistent with the City of Hayward Policies Plan, Walpert Ridge Specific Plan, Hayward Design Guidelines, or Hayward Hillside Design Guidelines listed above in section 2 pertaining to visual and urban design factors);
- (2) Have a substantial, demonstrable negative aesthetic effect;
- (3) Affect a scenic vista or scenic highway; or
- (4) Create light or glare.

c. Visual Analysis Assumptions

The impact analysis that follows is based on the following assumptions with respect to project characteristics and other factors:

- (1) Project Preliminary Development Plan Concept. The development portions of the project have been concentrated into the north-central portions of the site in order to: (1) keep development within the City's designated 1.5-mile (with potential to extend to 1.6-mile) *urban limit line*, (2) avoid the more sensitive southern portions of the site, and (3) minimize infrastructure extension requirements. As a further result, site grading and construction

activity, and associated visual impacts, are concentrated largely into one approximately 574-acre portion of the 1,635-acre project site, rather than spread over a greater extent of the site. This development concentration, while resulting in overall visual and other environmental benefits, also results in larger grading impacts within the concentrated development area; i.e., there are overall visual and other **significant environmental benefits** from the confining of grading to the contiguous north-central portion of the site.

An apparent trade-off, assuming no change in the overall development program (i.e., 650 homes and a championship 18-hole golf course) is mass grading within the concentrated 574-acre "townscape" in order to achieve feasible lot development, reasonable roadway grades and site accessibility, and a playable golf course.

The applicant has indicated that they have attempted to mitigate the adverse visual and environmental tradeoffs of this development and grading concentration through an applicant-labeled "townscape" approach to community design--i.e., "a more compact macro-level community design with varied and interestingly detailed design elements of the project architecture, landscape, parks and streetscapes."¹ The applicant states that these design concepts will be specifically addressed in the updated project design guidelines currently in preparation.²

The golf course will result in certain visual impact tradeoffs. The project applicant states that the golf course will play an important role in mitigating visual impacts around the new project development areas. The applicant states that the golf course itself, and especially the slopes leading up from the golf course to the housing areas "will be graded in an undulating contoured fashion," that "graded areas of the golf course will include swales, dips, bumps, and rises, emulating natural topography," and that natural rock outcroppings removed to construct the golf course will be "reconstructed on these slopes along with the addition of informal groupings of native oak and woodland and shrub plantings,"³ and that "longer flowing grasses will grace the upper reaches of the slope emulating the typical brown grass meadows on the site."⁴ Depending upon the extent to which such grading and landscaping approaches are actually specified and achieved as the project design is finalized, such grading and landscape design objectives could have significant beneficial visual impacts. The conceptual grading and landscape plan information submitted with the current project application (June 20, 1997 cut-and-fill map and subarea landscape schematic)⁵ did not include sufficient detail to convey

¹August 11, 1997 Memorandum from Bryan Grunwald Associates to Wagstaff and Associates.

²Ibid.

³Bryan Grunwald Associates memo; August 11, 1997.

⁴Ibid.

⁵Blue Rock Country Club 1" = 300'; June 20, 1997.

such grading refinements. As a result, *the visual simulation of the golf course illustrated on Figure 20 may convey a more uniform finished topography and landscaping plan.*

(2) Project Preliminary Design Criteria. The project designers also submitted a set of *Preliminary Design Guidelines* with the Preliminary Development Plan submittal that are intended to amend Walpert Ridge Specific Plan design guidelines pertaining to Blue Rock Country Club, and are to eventually be "refined as part of the Precise Plan Submittal."¹ These guidelines are paraphrased below:

- grading guidelines, including cut and fill slope contouring to blend with existing topography, creation of an overall undulating appearance, revegetation of graded slopes with "drought-tolerant" plantings to blend with the indigenous landscape;
- establishment of a common visual landscape theme to unify the various elements of the new community (use of consistent wall, fence, monument, and signage designs, use of indigenous plant materials);
- creation of a natural oak woodland type landscape for the golf course that "mimics the naturalized landscape of the Hayward Hills";
- ordered tree plantings along project streets; and
- salvaging and relocation of rock outcrops "disturbed during grading" in informal landscaped areas (e.g., golf course, larger landscaped zones, visible slope areas), and plantings of oaks and other native species around the reconstructed outcrops.

In addition to these guidelines that reflect themes already established in the Specific Plan, the applicant's Preliminary Design Guidelines also include:

- construction of "monument and roadway walls" of masonry, ornamental plaster, or similar solid material for security, noise abatement, and privacy purposes;
- development of "common fence vocabularies" in the Precise Plan for individual residential enclosures;
- submittal of a detailed lighting plan with the Precise Plan designed to maximize the "dark sky" setting of the site (i.e., protecting night views from ambient light interference);
- architectural design guidelines emphasizing Mission, Spanish Colonial, or Monterey style building design in the community; and
- general design guideline references to controls on building massing, detailing, materials and colors that are similar to policies already established in the 1995 Specific Plan.

¹Bryan Grunwald Associates and Fee Munson Ebert, Preliminary Blue Rock Country Club Design Guidelines; May 23, 1997.

(3) Preliminary Project Grading Plan and Design Criteria. At the current Preliminary Development Plan phase, a detailed grading plan and the final design guidelines for the project and associated implementation measures have not yet been established. The visual impact analysis that follows is based on the limited preliminary, conceptual information on project grading and landscaping aspects that was submitted by the applicant as part of the Preliminary Development Plan application (the "project") review process. The applicant's June 20, 1997 Preliminary Development Plan package included a conceptual grading map (a cut/fill map with 20-foot contours) plus limited landscaping information (sample subarea illustration). These exhibits were too gross in nature to show possible grading and landscaping refinements suggested in the Preliminary Design Guidelines, such as topographic undulations within the 20-foot contour, or introduced tree groupings, which could both significantly affect (reduce) project visual impacts.

As a result, the visual impact analysis that follows is based on conservative ("worst case") assumptions with respect to grading, landscaping, and building design--i.e., the analysis describes the potential adverse impacts if needed grading, landscaping, and building design refinements are not sufficiently incorporated into future iterations of the project (i.e., the Precise Plan, etc.).

d. Supplemental Impacts and Mitigation Measures

(1) Supplemental Visual Analysis Focus. The 1991 EIR stated that determination of the magnitude of the visual effects of development would require review of site plans and development proposals; and that, in general, aesthetic trade-offs between concentrating and dispersing development would have to be considered in evaluating significant effects (see Table 8). In the context of a diverse urban environment like Hayward and the greater urbanized East Bay Plain, the supplemental impact analysis herein focuses on potential effects of the proposed preliminary development plan on those vantage points considered to be particularly sensitive in terms of number of viewers, and the value, significance, and vulnerability of the view. Such vantage points include views from adjacent residential areas, from adjacent recreational areas, and from community- and regional-serving travel routes. Views from the adjacent Hayward Boulevard/Fairview Avenue loop, from the adjacent Garin Regional Park, and from key locations in the greater East Bay Plain (regional arterials, I-880, etc.), were considered to be of particular concern in this analysis.

(2) General Impacts on the Visual Character of the Project Site and Vicinity. As described in the 1991 Specific Plan EIR, the project would extend residential development from its present limit at the Fairview Avenue/Hayward Avenue loop to a point approximately one mile (5,400 feet) southward along Walpert Ridge. In general, this project aspect would be consistent with the planned physical arrangement of the Hayward Hills area of the city. The extension would be generally consistent with City of Hayward General Plan and Walpert Ridge Specific Plan policies permitting suburban and low density residential development within the *Urban Limit Line* portion of Walpert Ridge. In addition, the project golf course component would be

potentially consistent with the Walpert Ridge Specific Plan policy allowing "low density recreational uses" outside the ULL, subject to City Council approval.

As described in the 1991 EIR, because the project would appear as a continuation of existing urban features (the Prominence subdivision, other upper Hayward Boulevard hillside residential development, Cal State Hayward, etc.), it would have less of a visual impact than if it appeared to be discontinuous from existing development. The proposed concentrating (clustering) of project residential development on the northerly end of the ridge would preserve the remaining area of the ridge from the visual effects of urbanization. Approximately 1,061 acres (65 percent) of the 1,635-acre project site, encompassing the northeastern and southeasternmost portions of the property, would be dedicated and/or preserved as permanent, contiguous open space in the project development plan (see Table 2).

Nevertheless, specific aspects of the project design would result in potentially significant adverse visual impacts. The project would result in the irreversible loss of approximately 574 acres of existing, visually valuable ridgeline and hillside open space. The proposed recontoured and irrigated golf course would also alter the existing "natural" character of Walpert Ridge. As a result, the project would contribute to the cumulative loss of open space landscape on Walpert Ridge.¹ These visual and other specific impact potentials, and associated mitigation measures, are identified below.

(3) Project Impacts on Short-Range Views of Walpert Ridge. Similar to the visual effects anticipated in the 1991 EIR, the visual effects of the currently-proposed Blue Rock Country Club project on the ridgeline and upper hillsides would be pronounced in short-range views (less than 2 miles). As explained earlier, views of Walpert Ridge from most vantage points within a two-mile radius of the project site are obscured by intervening topography, vegetation, and urban development (see photos 1 and 6). However, direct, local views of the project development area atop the ridge are available from several vantage points along public roadways and private lands above Mission Boulevard. Some of these higher elevation, short-range vantage points would provide sweeping, largely unobstructed views of portions of the proposed project neighborhoods and golf course.

Project impacts on specific short-range vantage points are described below. To support the analysis, the appearance of the project from two short-range viewpoints selected as particularly representative of project visibility has been simulated on Figures B-4 and B-5, using computer-assisted visual simulation techniques. The simulations were independently prepared for the SEIR by Environmental Vision, computer modelling consultants. Several factors were considered in selecting these two viewpoints, including project visibility, the number and sensitivity of viewers, and potential effects on public views.

¹The existing "natural" character has been established in large part by a history of cattle grazing, which has resulted in the displacement of natural grasses and woodland vegetation with non-native grassland.

The simulations illustrate "before" and "after" visual conditions. The simulations show the location, scale, and visual appearance of anticipated project architectural and landscape features, based on an objective analytical and computer modelling process. The images are accurate within the constraints of available site and project data.

The simulations include anticipated landscaping at approximately three to five years maturity. (Appendix B of this SEIR includes simulation versions without the proposed landscaping.)

Impacts on Views from Fairview Avenue. Figure 19 provides a "before" and "after" depiction of the anticipated appearance of the project from Fairview Avenue viewpoint 2a southbound at the northern end of the site (see viewpoint location 2a on Figure 17). The western edge of residential Cluster A, i.e., the backs of approximately 20 lots, is located immediately above Fairview Avenue, approximately 170 to 290 feet back and 10 to 50 feet above the roadway. The simulation indicates that the home setbacks and elevation above the roadway, in combination with the project landscaping, would reduce the degree of visual impact. The existing Prominence subdivision homes directly across the road, and the eventual development of the approved Bailey project on the south side of Hayward Boulevard adjoining the western boundary of the project site (see Figure 13; 135 homes approved) would also reduce the visual contrast and impact of the project on this Fairway Avenue view.

Portions of the northernmost, secondary ridge forms of the project site that are visible in the southerly view from segments of Fairview Avenue between Arbutus Court and East Avenue (see photo 2b) would be preserved as permanent open space.

Based on these considerations, the project would be expected to have a less than significant impact on views from Fairview Avenue (see "3. Significance Criteria," above).

Impact VF-1: Views from Garin Regional Park. The potential extent and character of site grading, the potential shape and bulk of the project homes in Cluster E and F, the potential size and height of the golf clubhouse, and the potential for comparatively more uniform appearing finished topography and "manicured" turf of the heavily-graded and irrigated golf course fairways and greens of holes 6 through 9 and 18, could contribute to a **significant adverse visual impact on views from Garin Regional Park** (see criteria 1, 2, and 3 in section "b. Significance Criteria" above).

As explained above, the development portions of the project are now concentrated in the north-central portions of the site. As a result, site grading and associated visual impacts are concentrated within an approximately 574-acre area of the 1,635-acre project site, rather than spread over a greater extent of the site. There are overall visual and other **significant environmental benefits** from the confining of development and associated grading to the contiguous north-central portion of the site. The apparent trade-off, assuming no change in

View from Fairview Avenue Opposite the Project Site--
Before and After (5-Year Vegetation)

Figure 19



BEFORE



AFTER

View from Garin Regional Park Ridge Loop Trail-- Before and After (5-Year Vegetation)

Figure 20



BEFORE



AFTER

Note: The "After" simulation above does not show any golf course tree or shrub plantings. The applicant has indicated that more detailed landscape plans to be submitted in the future will include such landscaping (tree and shrub groupings, grass plantings, etc.) as part of or adjacent to the golf course. Such landscaping measures would be expected to reduce the visual impacts of the project.

the overall development program (i.e., 650 homes and a championship 18-hole golf course), is mass grading within the concentrated 574-acre "townscape" in order to achieve feasible lot development, reasonable roadway grades and site accessibility and a playable golf course.

Photos 3a and 3b show existing ("before") views of the project site from adjacent trail and hilltop locations in Garin Regional Park. Figure 20 provides a "before" and "after" depiction of the appearance of the project from viewpoint 3a, a close-by segment of Ridge Loop Trail, looking northeast. The southwestern edge and inner rooftops of residential Cluster F, as well as the southwest elevation of the proposed golf clubhouse, are visible in the simulation.

The simulation assumes two-story homes, and a two-story clubhouse with three-story monument towers, based on information provided by the applicant. Because the preliminary project design guidelines referring to natural-appearing cut and fill slope contouring, creation of an overall undulating appearance, and introduction of plant groupings and reconstructed rocky knobs have not yet been finalized and reflected in project grading and landscape plans (this is typically done at the subsequent Precise Plan phase), the simulation on Figure 20 does not show such features. Rather, the simulation conservatively conveys the potential visual impacts if such project design refinements are not adequately specified and implemented. The preliminary grading information indicates that the plan could result in the converting of existing undulating grassland topography of hillocks, rock outcrops, and deep swales in this southwestern portion of the site to more uniform and irrigated landscape significantly different than the natural landscape of Garin Regional Park. In particular, unless the applicant-suggested design guidelines calling for natural-appearing cut and fill slope contouring, creation of an overall undulating appearance, and introduction of natural-appearing arrays of tree-shrub groupings and reconstructed rocky knobs are effectively specified and implemented in subsequent phase of project design, the more uniform contours in combination with the irrigated and mowed turf of the golf course fairways and greens could occur as depicted in Figure 20. In addition, the proposed location of the golf course maintenance building on the Roman Catholic Bishop of Oakland property (not shown in Figure 20) could visually intrude into views from Garin Regional Park. Also, the proposed new location of Garin Park Lane within the EBRPD property to provide access to the maintenance building could require substantial grading on the visible southwestern Garin Park side of Three Oaks Knoll. These various project design aspects could result in a significant adverse visual impact on views from Garin Park (holes 8, 9, and 18 are visible in the Figure 19 simulation).

Mitigation VF-1: Specification and effective implementation of the grading, landscape, building and site design measures listed below in subsequent project design phases, subject to city design review and approval, would be expected to reduce the potential project visual impacts on Garin Regional Park to a *less-than-significant level*.

Grading. Most of all of these graded slopes visible from Garin Park are not within the housing and roadway areas of the project, but rather are within the golf course and the areas leading up to the housing and roadway areas. Subject to city design review and approval,

revise and refine the project layout and grading plan, and associated project design guidelines and implementation procedures for the southwestern portions of the development area visible from Garin Regional Park (in the current project plan, this portion of the development area includes the areas leading up to residential Clusters E and F, as well as golf course holes 6-9 and 18, and the golf clubhouse area) to achieve the following:

- create a more natural-appearing, more undulating finished topography through increased emphasis on Specific-Plan-recommended "landform grading techniques for the ridges and slopes in view of the park;
- increase grading plan consistency with the City's Hillside Design Guidelines calling for minimal grading and the blending of cut and fill slopes with existing slope characteristics to achieve a more natural topographic appearance;
- reduce the overall extent of cut and fill as much as practical; and
- improve the blending of cut and fill slopes with the existing natural, undulating topography of the ridge area.

Landscaping. Subject to city design review and approval, incorporate the following measures in the Specific Plan-required project "comprehensive landscape master plan" (required at the Precise Plan phase) for the southwestern portions of the development area:

- placement of natural-appearing arrays of native planting (coast live oak, California laurel, etc.) within project areas visible from the park, and especially within the transitional areas between the project development area and the park;
- recreation/restoration of natural appearing rock outcroppings throughout the transitional area;
- incorporation of more natural-appearing landscaping elements throughout the visible, southwestern hillside portions of the golf course, including informal groupings of native trees (coast live oaks, etc.), and preserved or reconstructed, natural-appearing, rock outcroppings;
- incorporation of natural-appearing landscape elements and grading techniques within those golf course and common landscape areas that are on the ridgeline and upper slopes of the project development;
- incorporation of tree planting between and among housing units to break repetitive housing rooflines.
- siting of neighborhood parks near the ridgeline to greatest extent possible to provide tree-filled breaks along the ridgelines;
- incorporate side-lot and rear-lot tree plantings to provide "green breaks" between adjacent houses.
- incorporation of larger lots sizes within the exposed southwest residential clusters;

- incorporation of plantings on golf course slopes leading up to the residential development with natural appearing trees and shrubs that will block views of the lower elevations of houses without restricting homeowners views;
- incorporation of natural appearing clusters and arrays in common area landscaping along this southwestern edge of the project;
- prohibitions on the introduction of incongruous appearing and, in particular, conspicuously tall, plant species on the upper slopes and ridgelines of the project (i.e., trees that may be visually conspicuous in short-, middle-, and long-range views).

Building Siting and Design. Subject to city design review and approval, revise and refine the project site plan and project design standards for the southwestern portions of the development area visible from Garin Regional Park to reduce the potential visual impacts of the project on the park. Incorporate some combination of the following types of measures in these revisions, subject to city design review and approval:

- placement of larger lot sizes¹ at the transition edges of the southwesternmost residential clusters;
- use of building shapes, materials, colors, and architectural details in the project homes that serve to blend the structures with the natural hillside setting;
- avoidance of long, unbroken roof lines;
- avoidance of large, visible wall surfaces on southwest-facing home and golf clubhouse elevations;
- articulation of the golf clubhouse structure to step back building heights along the southeast elevation;
- use of plantings to break up long horizontal lines along the southwest facade of the golf club structure;
- increased emphasis on more natural appearing building materials and colors in the golf clubhouse;
- relocation of the golf course maintenance building to reduce its visual prominence in Garin Park views; and
- relocation of the proposed access road to the golf course maintenance building to reduce its visual impacts on Garin Park (perhaps on the other side of Three Oaks Knoll).

¹The Walpert Ridge Specific Plan includes Standards and Guidelines for Grading (B.1) that state that "particularly for slopes visible from...Garin Regional Park..." "...for lots abutting the surrounding open space, large sloped lots (minimum 20,000 square feet) should be encouraged." The proposed preliminary development plan lot sizes along the Garin Park edge are in the 7,500-square-foot range.

Effective implementation of these measures would reduce this impact to a ***less-than-significant level***.

(4) Project Impacts on Medium- and Long-Range Views. Potential project impacts on medium- and long-range views of Walpert Ridge, and associated mitigations, are described below in terms of their aggregate, cumulative impact.

Impact VF-2: Project Cumulative Impact on Middle- and Long-Range Views of Walpert Ridge. The aggregate effect of the project housing clusters, and associated landscaping, roadways and fencing, would be visible as an extension of existing recent residential development on the Hayward Boulevard/Fairway Avenue loop in middle-range and long-range views of Walpert Ridge from the East Bay Plain, and as a result would contribute to a ***significant cumulative adverse impact*** on these views (see Criteria #2 and #3 under "b. Significance Criteria" above).

The project housing arrays would be located primarily along the ridgetop and upper, southwest-facing hillsides. Portions of the golf course would be located on the lower western slopes of the development area. Similar to the visual effects anticipated in the 1991 Walpert Ridge Specific Area Plan EIR, the southwestern portions of project residential Clusters F, E and C, as well as golf course holes 8, 9, and 18, would be visible in the aggregate from middle-range vantage points on the East Bay Plain 2-to-5 miles from the project site, including viewpoints in Hayward, Castro Valley, San Lorenzo and Union City. In particular, views of these project elements would be visible from a number of subregional arterials in these communities, including east-west (straight-on) segments of Tennyson Road and Industrial Parkway in Hayward, and side views from segments of Alvarado-Niles Road in Union City, as well as side views from the I-880 (Nimitz) freeway between the Industrial Parkway and Alvarado-Niles Road interchanges.

Most of these middle-range views of the project would occur at distances of greater than 3.5 miles. From this distance, individual homes in the exposed residential clusters would not be readily discernible. However, the aggregate effect of these exposed ridgetop and upper hillside development areas, including the residential structures, and associated landscaping, roadways and fencing, would be visible as is existing adjacent development on the Hayward Boulevard/Fairview Avenue loop. The home clusters on the ridgeline could be particularly visible due to their relatively large size, substantial profiles, and silhouette effects. When back- or side-lit, the housing clusters on the ridgeline could be prominent, regardless of the choice of building colors, materials, roof profile, etc. There would be no background to absorb these introduced structural and associated landscaping elements. Homes located on the upper hill faces of the ridge would be visually less sensitive in terms of impacts on offsite views than those silhouetted on the ridgeline.

The existing smooth, grassland vegetation of the upper hill faces creates a landscape that currently appears pristine and vulnerable to visual impact in the middle- and long-range views. In most intermediate and long-range views, those housing units located on the hill faces would have the ridge as a background into which the project structures, roadways, and fences could be less visually conspicuous, assuming effective implementation of Specific Plan policies to employ appropriate building materials, colors, shapes, and roof profiles, and appropriate planting and fencing techniques.

As a result, the effectiveness of project controls on building design, including height, perceived mass, shape, roof profile, materials, and colors, and the project controls on landscaping (plant types and patterns) will be critical in reducing the visual effects of the project. Failure to adopt and/or fully implement design controls for the ridge crest and hillside face would result in a noticeable project contribution to the cumulative visual impacts of urban development in the Hayward Hills.

Mitigation VF-2: Implementation of the project grading, landscaping, site and building design revisions listed below, subject to city design review and approval, would be expected to reduce the potential cumulative visual impact on middle- and long-range views from the East Bay Plain to a ***less-than-significant level***.

Grading. Revise the project grading plan to incorporate the revisions described above under *Mitigation VF-1*.

Landscaping. Incorporate into the project "comprehensive landscape master plan" the landscape design measures that are described above under *Mitigation VF-1*.

Site and Building Design. Revise and refine the project site plan and project design standards to incorporate all site planning and building design measures described above under *Mitigation VF-1*. Also, during the overall project design review process, give special consideration to the visual sensitivity of the southwestern facing ridgeline and hillside portions of the project.

(5) Project Consistency with Adopted City Design Policies. Project consistency with adopted city design and grading policies, standards and guidelines formulated to minimize the visual impacts of ridgeline and hillside development are identified below.

Impact VF-3: Grading Plan Inconsistencies with City Policies. Although project grading activities are confined to the north-central portion of the site (the majority of the site--65 percent--is retained as open space), the project grading concept for the north-central portion of the site includes basic aspects and characteristics that may be inconsistent with the adopted policies, standards, and guidelines set forth in the Hayward General Policies Plan and Walpert Ridge Specific Plan. These project aspects represent a **significant adverse visual impact** (see Criteria #1 and #3 under section "b. Significance Criteria," above).

General Plan Policies. The Walpert Ridge Specific Plan states that it "implements the City of Hayward's General Plan and conforms with General Plan policies,"¹ and additionally, "supplements the General Plan by providing more specific policies and design standards and guidelines for the Walpert Ridge area."² The Specific Plan states that the following General Policies Plan policy guided preparation of the specific plan: "Design of development on Walpert Ridge shall reflect design sensitive to maintaining a natural hill environment; encourage maximum retention of natural topographic features such as drainage swales, streams, slopes, rock outcroppings and natural plan formations through site plan review." (Reiterated on page 5 of the Walpert Ridge Specific Plan; no amendment proposed in project application.) The specific plan also points out that the General Policies Plan Conservation and Environmental Protection Element includes policies that "emphasize the conservation and protection of important physical and wildlife resources in the hill area."³

Specific Plan Policies. The Walpert Ridge Specific Plan includes policies, standards, guidelines, and requirements calling for development designs that minimize grading, comply with other city grading guidelines, avoid visually sensitive areas, use stepped residential building designs to limit grading and alterations of the natural terrain, and avoid use of substantial grading to create usable open space. These standards also call for maximum cut and fill slopes of "3:1 or less," and state that a "steeper slope is acceptable where it will conform to the natural terrain.

The Specific Plan itself, with the proposed amendments, includes the following plan objectives and development policies pertaining to visual impacts (proposed revisions in bold and underlined):

- Preserve **to the extent possible** important and sensitive open space features such as Rocky Knoll, Bay Trees Knoll, Three Oaks Knoll..." (p. 20)

¹Walpert Ridge Specific Plan, p. 4

²*Ibid.*, p. 4

³*Ibid.*, p. 6

- Development proposals shall substantially conform to this Specific Plan, as well as all applicable City ordinances, standards and guidelines, including but not limited to: the Zoning Ordinance, Subdivision Ordinance, Grading Ordinance, Tree Preservation Ordinance, Standard Details, Design Review Guidelines, and Hillside Design and Urban/Wildland Interface Guidelines." (p. 40)
- Where any provisions of this specific plan differ from any standards or guidelines contained in the above-referenced documents, this specific plan shall govern. (p. 41)

Specific Plan Standards and Guidelines for Grading. The Specific Plan (SP) also includes a Conceptual Grading Plan (SP Figure 13 on SP page 71) and states that "grading plans for individual projects should be reviewed for consistency with the Conceptual Grading Plan." The cut-and-fill map submitted with the project preliminary development plan package indicates cut and fill depths that exceed what is indicated in the current SP Conceptual Grading Plan. The applicant's preliminary development plan package acknowledges this inconsistency by calling for replacement of the current SP conceptual grading plan with a revised version incorporating the project grading concept. In addition, the Specific Plan includes the following pertinent design standards and guidelines for grading:

- A.2 To the extent feasible, grading of development areas should conform to the City's Hillside Design and Urban/Wildland Interface Guidelines. More extensive grading in localized areas may be allowed where such grading is necessary to provide adequate street grades, to repair landslide areas, or to provide safe access to individual lots. The creation of large uniform stepped terraces should be avoided. Variations in the manufactured landform should be encouraged for compatibility with the natural terrain. (p. 60)
- B.1 For large highly visible man-made slopes, particularly slopes visible from Hayward Boulevard, Fairview Avenue, Garin Regional Park, the Bay Ridge Trail, and surrounding residential areas, "landform grading techniques" shall be utilized to create slope areas that appear as natural, table landforms. (p. 60) These techniques include:
- a. Creating variable slope grades, undulating slopes, and swales to minimize the appearance of an engineered slope with a uniform grade.
 - c. (Lot Grading) 3. ...for lots abutting the surrounding open space, large sloped lots (minimum 20,000 square feet) should be encouraged. Dwellings should exhibit stepped or pier and grade beam foundations to limit grading and alteration of the natural terrain..." (p. 73)

Project Consistency with City General Plan and Specific Policies. The development portions of the project are now concentrated into the north-central portions of the site. As a result, site grading and associated visual impacts are concentrated within an approximately 574-acre area of the 1,635-acre project site, rather than spread over a greater extent of the

site. An apparent trade-off, assuming no change in the overall development program (i.e., 650 homes and a championship 18-hole golf course) is mass grading within the concentrated 574-acre "townscape" in order to achieve feasible lot development, reasonable roadway grades and site accessibility, and a playable golf course. There are no major geotechnical repair needs that appear to indicate a need for mass grading. The proposed grading plan is expected to involve cuts of 20, 40, 60, 80, and in some areas in excess of 80 feet in depth. The maximum inclination of both cut and fill slopes is expected to be between 2:1 and 3:1. Approximately seven million cubic yards of earth would be moved within the site in the form of balanced cut and fills.

With respect to the natural features diagrammed on Figure 16, the grading plan would involve substantial recontouring and lowering along those segments of the main ridge crest that traverse the development area, and substantial recontouring (reduction) of a number of the internal development area high points mapped on Figure 16, including Rocky Knoll. Most, if not all, of the existing natural outcroppings would be removed, including those atop the Rocky Knoll. The grading plan would also involve extensive filling of secondary ravines and swales in the development area.

Table 9 provides the results of an analysis by the SEIR authors of the proposed project grading plan, showing the relative degree of cut and fill proposed for each neighborhood cluster and for the various golf course components. The table indicates the following:

Particularly substantial cut grading is proposed to create neighborhood clusters A, B, C, and G. Particularly substantial fill placement is proposed to create neighborhood clusters F and G.

Similarly, particularly substantial cut grading is proposed to create golf course holes 4, and to a lesser extent 1-2, and 3-4. Particularly substantial fill placement is proposed to create golf course holes 3-4, 5-6, and 7.

The applicant has attempted to mitigate the adverse visual and environmental tradeoffs of this development and grading concentration through an applicant-labelled "townscape" approach to community design--i.e., "a more compact macro-level community design with varied and interestingly detailed design elements of the project architecture, landscape, parks and streetscapes."¹ Nevertheless, the extent and nature of the project preliminary grading plan² does not appear to be in sufficient conformance with the General Plan and Walpert Ridge Specific Plan grading guidelines cited above. The current extent of proposed grading (cut and fill) may not be in keeping with the spirit of the general plan policy calling for grading that is "sensitive to maintaining a natural hill environment" and that "encourage(s) maximum retention of natural topographic features." Rather, the grading plan includes substantial removal of

¹August 11, 1997 memorandum from Bryan Grunwald Associates.

²Preliminary Development Plan Application Package, Sheet 13, cut/fill map, June 20, 1997--20 foot contours.

Table 9
GRADING ANALYSIS

LEGEND:

Cut-and-Fill Rating:

- 1 Low-to Moderate**
- 2 Moderate-to-Substantial**
- 3 Substantial**
- 4 Very Substantial**
- 5 Highest**

Cut and Fill Depth:

- Generally less than 20 feet
- Extensive areas of 20 to 40 feet
- Extensive areas of 40 to 60 feet
- Extensive areas of 40 to 80 feet
- Extensive areas of 40 to over 80 feet

ANALYSIS CONCLUSIONS (RATINGS BY PROJECT SUBAREA):

Ridge Crest Impacts: Bold font below indicates project neighborhood clusters and golf course components where the proposed grading plan may substantially affect the existing main crest of Walpert Ridge, i.e., may result in grading of substantial portions of the crest at depths of 20 to in excess of 80 feet below the current natural grade.

<i>Neighborhood Cluster</i>	A	B	C	D	E	F	G
Degree of Cut	4	3	3	2	3	1	4
Degree of Fill	2	1	1	2	2	4	5
<i>Golf Course Holes</i>	1-2	3-4	5-6	7	8,9,18	10-17	
Degree of Cut	3	3	2	1	1	4	
Degree of Fill	1	4	5	4	2	3	

SOURCE: Wagstaff and Associates based on applicant-supplied cut-and-fill map.

natural knolls (hill features) and filling of drainage swales, and substantial removal of rock outcroppings and other site natural topographic features, including Rocky Knoll.

Although the preliminary grading plan would not affect Bay Trees Knoll, and would preserve Three Oaks Knoll, the extent and character of the proposed grading (cut and fill), also may not be in keeping with the spirit of Walpert Ridge Specific Plan policy to preserve, to the extent possible, important and sensitive open space features. Rather, the grading plan could result in substantial modification to the natural topography with substantial cut and fill, resulting in significant reductions or losses of natural topographic features (knolls and swales), including Rocky Knoll.

The areas of proposed extensive cut and fill are not solely to provide adequate street grades and are not necessary to repair landslide areas; rather, they are intended to achieve the desired development capacity and playable golf course character.

With respect to man-made slopes visible from Garin Regional Park, the conceptual grading design for this area, as described under *Impact VF-1*, does not adequately convey the concept of "landform grading techniques" to create "natural, stable landforms." The preliminary cut-and-fill map does not adequately indicate creation of "variable slope grades," and "undulating slopes and swales" (again, this may in part be due to the gross nature of the Preliminary Development Plan grading information). Also, lot sizes along the Garin Park edge are in the 7,500 square foot range; i.e., well under 20,000 square feet.

Mitigation VF-3: The proposed preliminary development plan package includes specific revisions to current Walpert Ridge Specific Plan policies to accommodate the project, including replacement of the current Conceptual Grading Plan. To eliminate the remaining apparent plan inconsistencies identified above, further revise (amend) associated specific plan policies to fully reflect the final project grading plan, or revise the grading concept to incorporate the revisions listed below. Implementation of these listed measures, subject to city design review and approval, would be expected to achieve project consistency with adopted city policies, standards, guidelines and requirements pertaining to the visual impacts of grading and thus would reduce this visual impact to a ***less-than-significant level***.

Extensive grading volumes do not necessarily connote adverse visual impacts. Through incorporation of the "landform grading techniques" that reflect natural topographic features, the potential visual impact of extensive grading would be substantially reduced and project consistency with related city policies, standards and guidelines would be achieved through incorporation of the following measures into the project design:

- Implement *Mitigation VF-1*;
- Improve project grading plan compliance with Walpert Ridge Specific Plan policies, standards and guidelines calling for minimizing grading, conforming to the City's Hillside

Design Guidelines, maintaining a natural hill environment, encouraging maximum retention of natural topographic features, and preserving important and sensitive open space features;

- Incorporate increased use of "landform grading" techniques to create more natural appearing land forms, including more varying slope grades, and more undulating slopes and swales, to minimize the appearance of engineered slopes with uniform grades;
- Place emphasis on natural-appearing, undulating finished contours along the main ridge, secondary ridges, and upper hillsides, particularly within the golf course;
- Design all graded slopes that are not within the housing and roadway areas in an undulating fashion, as outlined in the Specific Plan-recommended "landform grading techniques";
- Blend cut and fill slopes into existing slopes to achieve a more natural topographic appearance;
- Reduce the vertical depth of cuts and fills (see City's Hillside Design Guidelines);
- Reduce the level of grading on the main ridge crest;
- To the extent possible, reduce the depth of fill in secondary ravines and swales;
- Reduce use of "mass grading" as a means of creating the golf course; if feasible, design the golf course to incorporate a more natural, more undulating, less uniform appearance;
- Where removal of rocky outcrops such as Rocky Knoll is unavoidable, provide mitigation in the form of reconstructed rocky knobs using onsite stone grouped in natural appearing clusters throughout the golf course and in some common landscape areas;
- Increase lot sizes along the Garin Park edge of the project (see footnote 1, page 151);

(7) Project Impacts on the Main Ridge Crest. The concentration of project grading and development activities in the 574-acre contiguous "townscape" area will have obvious visual and other environmental benefits over a more dispersed development plan. Nevertheless, as shown in Table 9, the degree of cut grading anticipated for three of the proposed neighborhood clusters within this development area--A, B, and C, and golf course holes 1 through 4 and 10 through 17, would result in substantial modification (lowering) of the main ridge crest contour along the north-central portion of the site.

Impact VF-4: Grading and Development Atop the Main Ridge Crest. Although project grading activities are confined to the north-central portion of the site (the majority of the site--65 percent--is retained as open space), the substantial extent of proposed grading on the north-central portion site's main ridge crest, and the proposed placement of project lots in neighborhood clusters A, B, and C atop the graded ridge crest, could have a substantial, demonstrable negative visual effect. This would represent a **significant adverse visual impact** (see Criterion #2 under section "b. Significance Criteria," above).

Approximately 40 to 45 lots on the southwestern edges of the neighborhood clusters A, B, and C would be located atop the recontoured ridge crest. These grading and site plan aspects could have a substantial, demonstrable negative visual effect on mid- and long-range views of the project.

The proposed grading actions here would lower the finished grade of most portions of the main ridge crest within the development area (see Figure 16) by 40 or more feet, and for some of the highest existing crest elevations, by increments in excess of 80 feet (see Table 9).

Mitigation VF-4: Implementation of the grading plan, site plan, and development standard revisions listed below, subject to city design review and approval, would be expected to reduce the impact of project grading and development atop the main ridge crest to a **less-than-significant level**.

- implement *Mitigations VF-1 and VF-3* above;
- increase the use of development clustering to minimize disturbance of the main ridge crest.

(7) Project Impacts on Sensitive Visual Features. The Walpert Ridge Specific Plan calls for preservation of important sensitive onsite visual features, i.e., existing trees, rock outcroppings and other natural features, including the Rocky Knoll. The Specific Plan also calls for grading, site planning, lot design, and architectural design measures to preserve rock outcroppings.

Impact VF-5: Loss of Sensitive Visual Features. The proposed development plan would concentrate development in a 574-acre contiguous area on the north-central portion of the 1,635-acre site, preserving sensitive visual features on the remaining 1,061 acres (65 percent) at the site. Within the development area, the plan would also avoid Bay Trees Knoll and would preserve Three Oaks Knoll. Nevertheless, the project site plan and grading plan would still result in the loss of a number of Specific-Plan-identified important, sensitive onsite visual features within the 574-acre development area, including Rocky Knoll, most other existing rock outcroppings, and some small areas of oak woodland. These effects would represent a **significant adverse visual impact** (see Criteria #1 and #2 under "b. Significance Criteria," above).

The project development plan confines development to the 574-acre north-central area of the site and within this area, incorporates the concept of clustering of the 650 homes in order to create the golf course holes and contain the residential development to the portions of the area nearest the existing Prominence subdivision. Nevertheless, the plan would have the following effects that appear to be inconsistent with the Specific Plan:

Project Effects on Rock Outcroppings. The project grading plan information indicates that most, if not all, of the existing natural rock outcroppings within the development area would apparently be removed, including those atop the Rocky Knoll illustrated on Figure 16.

Project Effects on Other Natural Features. The project grading plan would result in a substantial modification and lowering of a number of existing high points in the development area, including Rocky Knoll (cuts from 20 to 60 feet are anticipated at these locations).

Project Effects on Oak Woodland. The proposed grading plan appears to avoid cut and fill in most of the existing oak woodland areas of the site. However, review of the current grading plan indicates that approximately 2 to 3 acres of oak woodland may be removed to accommodate grading for the third golf hole and approximately 5 acres of oak woodland would have to be removed to accommodate grading for the fifth hole (less than 5 percent of the overall onsite oak woodland inventory).

Mitigation VF-5: Implementation of the grading plan and site plan revisions listed below, subject to city design review and approval, would be expected to reduce the project impact on identified sensitive visual features to a **less-than-significant level**.

- Where removal of sensitive landscape features such as Rocky Knoll is unavoidable, provide mitigation in the form of reconstructed rocky knobs using onsite stone grouped in natural appearing clusters throughout the golf course and in some common landscape areas;
- Revise the project site plan and grading plan as necessary to avoid those oak woodland areas identified above as potentially lost under the current grading plan;

- Reduce the depth of cut and fills within the golf course areas and under the tennis center to the greatest extent possible;
- Revise the project site plan and grading plan to provide for selective preservation of particularly distinctive existing rock outcroppings;
- Incorporate increased use of building clustering as one means to preserve identified significant features; and
- Increase clustering in neighborhood "G" to allow for greater lot sizes in the more visually sensitive areas.

(8) Light and Glare Impacts. The Specific Plan includes policies and guidelines to minimize the nighttime visual impacts of exterior lighting, including street lighting. The proposed project design guidelines incorporate these objectives and a number of additional street lighting and exterior lighting control measures to reduce the potential for light glare and spillover. Assuming effective implementation and enforcement of these measures, no significant light or glare impact is anticipated.

C. VEGETATION AND WILDLIFE

This section describes existing vegetation and wildlife on the project site, assesses likely project impacts on those resources, and recommended measures to mitigate potentially significant impacts.

Prior to preparing this analysis, Monk & Associates (M&A) reviewed several previously-prepared reports that evaluated biological resources on the project site, including (1) the Walpert Ridge Specific Area Plan: Environmental Impact Report (ESA, Inc., February 22, 1991); (2) Planning Implications of Alameda Whipsnake Presence at Hayward 1900, Alameda County (LSA Associates, Inc., August 14, 1995); (3) Updated Status Report on Tiger Salamander and Red-Legged Frog Surveys, Walpert Ridge/Hayward 1900 Property (Resource Management International, Inc. (RMI), August 12, 1996); (4) RMI's letter-report on "Revised Concept Grading and Lot Plan, March 21, 1997 - Biological Resources"; and (5) RMI's May 22, 1997 letter-report on "Blue Rock Country Club 1.6 Mile Grading and Lot Plan - Biological Resources." M&A also reviewed letters prepared by resource agencies (i.e., California Department of Fish and Game and U.S. Fish and Wildlife Service), and general policies and plans the City of Hayward has established to protect biological resources. Finally, M&A reviewed the Fifth Edition of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994), and California Department of Fish and Game's (CDFG) Natural Diversity Database (RareFind application) for records of special-status species within five miles of the project site.

In addition to this literature review, an M&A wildlife biologist and a botanist/wetlands specialist conducted a half-day cursory site visit on April 23, 1997.

1. SETTING

The project site is located on Walpert Ridge in Alameda County. The site is situated in the Coast Ranges of Central California within direct line of sight from San Francisco Bay. The natural plant communities on the project site to a large extent reflect the moisture available during the various seasons of the year. Average annual rainfall is approximately 18 inches, occurring mostly during winter and spring.¹ Sandy soil has formed over the bedrock of cretaceous sandstone; outcrops of this sandstone occur at many locations along Walpert

¹ESA (Environmental Science Associates). 1991. Walpert Ridge Specific Area Plan: Environmental Impact Report. Draft. February 22, 1991.

Ridge. In addition, there are numerous areas on the project site that are characterized by high soil moisture due to groundwater seeps.

a. Plant Communities

Plant communities and wildlife habitats described in the following sections are based primarily on habitat descriptions previously prepared by ESA in the 1991 EIR. Acreage figures were calculated by Carlson, Barbee, & Gibson, Inc. (engineers for the project applicant) from a map prepared by RMI (biologists for the applicant) and digitized into a computer aided design (CAD) program. Table 1 in Appendix C lists plant species identified on the project site either by ESA or Monk & Associates (preparers of this SEIR section).

Figure 21 shows the location of the plant communities described in this subsection.

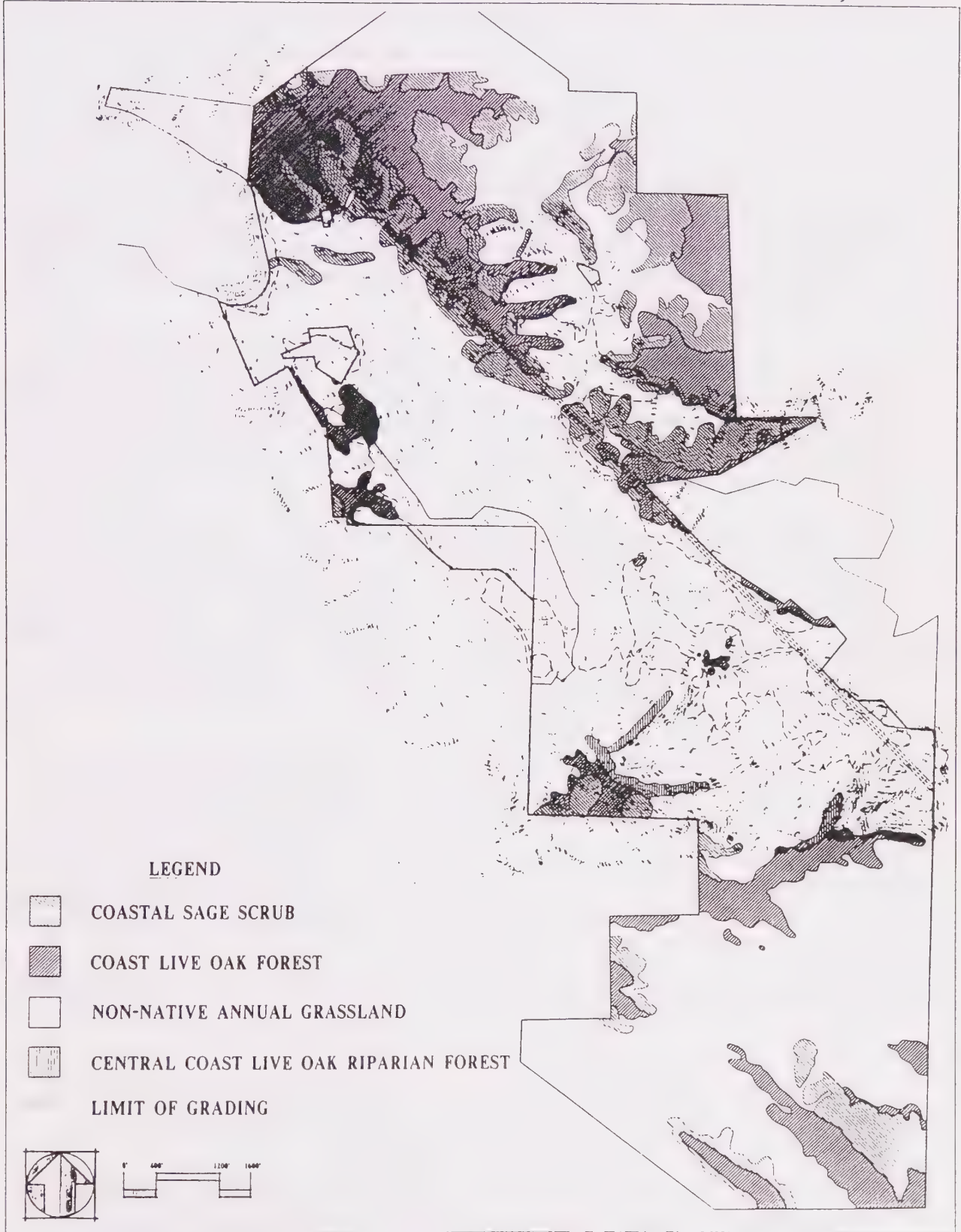
(1) Coast Live Oak Forest. Approximately 270 acres of the project site is comprised of coast live oak forest. This plant community is found at the higher elevations of canyon slopes, especially on north, east, and south-facing slopes, which have the most sheltered microclimate and the most available moisture.¹ On the project site, such slopes support stands of coast live oak forest. The dominant species in this forest is coast live oak (*Quercus agrifolia*) with California bay (*Umbellularia californica*) trees scattered throughout this community. An occasional riparian species such as big leaf maple (*Acer macrophyllum*) or California buckeye (*Aesculus californica*) can also be found in this community on the project site. Unlike other woodland communities in the region that have dense understories of shrubs, the understory of this plant community consists primarily of grasses and forbs, except in the openings where coastal sage scrub species may be found. Annual grasses, chickweed (*Stellaria media*), sun cups (*Camissonia ovata*), and tooth-wort (*Cardamine californica*) are common understory herbaceous species. In sunny areas, an occasional bunch of California fescue (*Festuca californica*) can be observed, while in shady places, California blackberry (*Rubus ursinus*) and bracken fern (*Pteridium aquilinum*) are present. Grazing practices have probably limited the extent of coast live oak forest on the site. Cattle are known to damage or eliminate oak seedlings, and thereby disrupt oak propagation.

(2) Central Coast Live Oak Riparian Forest. Approximately 12.4 acres of the project site is comprised of Central Coast live oak riparian forest. The project site's canyon floors serve as channels for surface runoff and emerging groundwater, which allows for the development of a riparian community. "Riparian" vegetation is defined as vegetation that occurs in or adjacent to drainage-ways and/or their floodplains, and is further characterized by species different

¹Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Nongame-heritage program, California Department of Fish and Game, Sacramento, CA., 156 pp.

Figure 21

Plant Communities on the Project Site



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

from the immediate surrounding non-riparian community.¹ Central Coast live oak riparian forest is found only in the southern portion of the project site. This natural community is essentially the same as the coast live oak forest, with the addition of tree and shrub species typical of riparian associations. Riparian tree and shrub species found in this community on the project site include California buckeye, big-leaf maple, valley oak (*Quercus lobata*), blue elderberry (*Sambucus mexicana*), arroyo willow (*Salix lasiolepis*), alder (*Alnus* sp.), and sycamore (*Plantanus racemosa*). This community also has dense understory of mugwort (*Artemesia douglasiana*), Himalayan blackberry (*Rubus discolor*), poison oak (*Toxicodendron diversilobum*), and sticky monkeyflower (*Mimulus aurantiacus*). California bay, coyote brush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*), and coffeeberry (*Rhamnus californica*) are also scattered throughout this community.

Central Coast live oak riparian forest has been described as a sensitive community meriting inclusion in the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*.² CDFG also considers this plant community rare enough to warrant monitoring, and has included it in California Natural Diversity Database (CNDDB) records.³

(3) Coastal Sage Scrub. Approximately 231 acres of the project site is comprised of coastal sage scrub. This plant community generally occupies the lower elevations of south-facing slopes and the upper elevations of north-facing slopes, most notably on steeper grades. This plant community is dominated by California sage (*Artemesia californica*), coyote brush, poison oak, sticky monkey-flower, and horehound (*Marrubium vulgare*). Occasional patches of coffeeberry, blue elderberry, and canyon gooseberry (*Ribes menziesii*) can be found, with an understory of star lily (*Zigadenis fremontii*).

(4) Non-Native Annual Grassland. Non-native grassland comprises over 60 percent of the entire project area. This plant community covers approximately 1,120 acres of the project site, and is most often found on the upper elevations of south-facing slopes and ridges where the least moisture is available. Grazing maintains the current distribution of the grasslands, not allowing woodlands or scrub communities to spread. Grazing has also resulted in the displacement of native perennial grass species in favor of better adapted non-native annual species; hence, only a few native grass species occur on the project site. Grasslands within the project site are currently dominated by introduced annual grasses such as wild oat (*Avena fatua*), fescues (*Vulpia myuros* and *V. bromoides*), soft chess brome (*Bromus hordeaceus*),

¹Johnson, R. R., S. W. Carothers, and J. M. Simpson. 1984. A riparian classification system. In R. E. Warner and K. M. Hendrix, Eds. *California Riparian Systems: Ecology, Conservation, and Productive Management*. University of California Press, Berkeley, CA.

²Skinner, M.W., B.M. Pavlik (eds.). 1994. *Inventory of rare and endangered vascular plants of California*, Fifth Edition. Calif. Native Plant Soc. Spec. Publ. No.1. Sacramento, CA. 338 pp.

³California Department of Fish and Game, Natural Diversity Database. 1997.

and Italian rye grass (*Lolium multiflorum*). Several non-native forbs, such as filarees (*Erodium botrys*, *E. cicutarium*, and *E. moschatum*), bull thistle (*Cirsium vulgare*), pineapple weed (*Chamomilla suaveolens*), and rose clover (*Trifolium hirtum*) are present in the more disturbed areas. Species such as poison hemlock, sweet fennel (*Foeniculum vulgare*), cow parsnip (*Heraculum lanatum*), curly dock (*Rumex crispus*), and false Solomon's seal (*Smilacina stellata*) are present at the grassland edges where this community transitions into oak forest. Spring wildflowers observed in the grassland include sun cups, California poppy (*Eschscholzia californica*), checkerbloom (*Sidalcea* sp.), and buttercup (*Ranunculus californicus*). Native, perennial bunch grasses such as purple needle grass (*Nasella pulchra*) and California oat grass (*Danthonia californica*) can also be found scattered throughout this community

(5) Rock Outcrops. Rock outcrops occur on the tops of knolls, on ridges, and on some slopes. They occur predominantly in areas characterized by non-native annual grassland; however, they are distinct habitats, having their own unique plant community. Except for drought-resistant plants such as Sonoma tarweed (*Hemizonia lutescens*) and dove weed (*Eremocarpus setigerus*), the only plants still alive in the grassland community during the hot, dry summers grow between boulders in rock outcrops. Many species found in the rock outcrops are also found in coastal sage scrub and riparian woodland communities. Woody species growing in the rock outcrops include California blackberry, sticky monkeyflower, poison oak, coast live oak, toyon, California buckeye, California bay, elderberry, coffeeberry, and coyote brush. Herbaceous species found growing in between the rocks include miner's lettuce (*Claytonia perfoliata*), California polypody fern (*Polypodium californicum*), and cud weed (*Gnaphalium* sp.). The presence of these species in the rock outcrops is largely a result of an absence of grazing pressure due to the relative inaccessibility of the plants to cattle.

(6) Grazing Disturbances. Grasslands on the project site are moderately to heavily grazed and, therefore, support depauperate populations of typical terrestrial grassland mammals such as California voles (*Microtus californicus*), deer mice (*Peromyscus maniculatus*), and pocket gophers (*Thomomys bottae*). Heavy grazing removes most of the primary productivity of the grassland, leaving little food or cover for wildlife, and thereby reduces the area's value to local wildlife populations. Overgrazing destroys the habitat of many of the small herbivores that form the base of the grassland food chain.

Ranching practices have also had some positive effects on some wildlife species. Creation of numerous small ponds for cattle watering sites in the upper reaches of the project site has enhanced the habitat value of the area for animals requiring water during the dry portion of the year, and for animals that prey on them. Grazing has also reduced the cover afforded small wildlife species, making these species more available to hawks and eagles that prey on them. Trampling and grazing by cattle also eliminates the brush understory in many areas of the woodlands. Consequently, livestock grazing has played a direct role in shaping the distribution of plant communities observed within the project site.

Grazing, especially overgrazing, contributes to excessive siltation and fertilization of the numerous project site drainages. In grazing, cattle remove vegetative cover, disturb soil

surfaces with their hooves, and produce substantial amounts of manure. Rainfall striking bare surfaces loosens soil and carries it to the project site's drainages. Nutrients from decomposed cattle manure are similarly washed into creeks, contributing to algal blooms in these creeks.

b. Wildlife Habitats

The Hayward hills have extensive natural areas that support an abundant and varied wildlife population. The Hayward Planning Department study¹ contains an exhaustive list and detailed descriptions of wildlife in the area. The study identifies habitat for 12 species of reptiles, nine species of amphibians, at least 117 species of birds, and an estimated 32 species of native and introduced mammals. Table 2 in Appendix C provides a list of wildlife species observed or expected to occur on the project site.

(1) Wildlife Species. Mammal species found in the hills include Virginia opossum (*Didelphis virginiana*), broad-footed mole (*Scapanus latimanus*), ornate shrew (*Sorex ornatus*), bats (*Myotis* spp., *Tadarida macrotis*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel, Botta's pocket gopher, California vole, western harvest mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), dusky-footed woodrat (*Neotoma fuscipes*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Columbian black-tailed deer (*Odocoileus hemionus columbianus*).

Common birds of the Hayward hills include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), scrub jay (*Aphelocoma coerulescens*), American robin (*Turdus migratorius*), western bluebird (*Sialia mexicana*), western meadowlark (*Sturnus neglecta*), California towhee (*Pipilo crissalis*), and golden-crowned sparrow (*Zonotrichia atricapilla*). Reptiles, including southern alligator lizard (*Gerrhonotus multicarinatus*), western fence lizard (*Sceloporus occidentalis*), California king snake (*Lampropeltis getulus*), pacific gopher snake (*Pituophis melanoleucus*), and western racer (*Coluber constrictor*), are common in the hills. Amphibians identified on the project site include Pacific tree frog (*Pseudacris regilla*), California newt (*Taricha torosa*), and the Federally listed threatened California red-legged frog (*Rana aurora draytonii*).²

(2) Habitats. The wildlife inhabiting the project site and the surrounding undeveloped lands require food, shelter, and water. To fulfill these requirements, most animals must move between two or more plant communities (grassland, woodland, rock outcrops, etc.). For

¹City of Hayward. 1977a. Hayward Hills Area Wildlife Study. Hayward Planning Department. December 1977. 93 pps.

²RMI (Resource Management International, Inc.). 1996. Updated Status Report on Tiger Salamander and Red-Legged Frog Surveys, Walpert Ridge/Hayward 1900 Property. August 12, 1996. 4 pps.

instance, grasslands are the base of the food web upon which small mammals, birds, reptiles, and larger species depend, but grasslands provide insufficient cover for larger terrestrial wildlife, such as mountain lion or bobcat, and many bird species, such as the great horned owl or white-tailed kite. These species find shelter in adjacent woodlands and scrub habitats.

Rock outcrops scattered along the ridge crests provide wildlife shelter and food resources within large expanses of grassland. Many of the small mammals of the grassland inhabit crevices and fissures in these outcrops. Denning opportunities are also provided for coyote and gray fox. Rock outcrops provide hunting perches for some birds of prey, and may provide nesting opportunities for other species. Lizards, such as the western fence lizard, inhabit rock outcrops adjacent to grassland. Snakes use the grassland for cover for hunting prey.

(3) Wildlife Corridors. Wildlife corridors are linear and/or regional habitats that provide connections to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: (1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; (2) populations can move in response to environmental changes and natural disasters; and (3) individuals can recolonize habitats from which populations have been locally removed.¹ All three of these functions can be met if both regional and local wildlife corridors are accessible to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

In previous studies of the Walpert Ridge area, two areas on the project site were identified as corridors that are most traveled by wildlife.² Both of these corridors are in Section 32, in the southern portion of the project site. These movement corridors serve not only as local wildlife corridors, allowing movement from one side of the project site to the other, but serve as regional corridors as well, allowing mammals to migrate great distances across the ridge to and from Palomares Creek to the northeast, Tolman Peak to the southwest, and Garin and Dry Creek/Pioneer Regional Parks to the west, and another portion of Garin Regional Park to the east of the project site.

¹Beier, P. and S. Loe. 1992. "In my experience..." a checklist for evaluating impacts to wildlife movement corridors. Wildlife Society Bulletin Vol. 20(4): 6.

²ESA (Environmental Science Associates). 1991. Walpert Ridge Specific Area Plan: Environmental Impact Report. Draft. February 22, 1991; McGinnis, S.M. 1995. An Analysis of Habitats Within the Hayward 1900 Walpert Ridge Project Site That Exhibit Potential for Supporting the Threatened Alameda Whipsnake. Prepared for Sheppard, Mullin, Richter & Hampton, San Francisco, California. 13 pps.

c. Special-Status Species Issues

For purposes of this report, special-status species are plants and animals that are legally protected under the State and Federal Endangered Species Acts or other regulations, and species that are considered rare by the scientific community. Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the California Endangered Species Act (Fish and Game Code 1992 §2050 *et seq.*; 14 CCR §670.1 *et seq.*) and/or the Federal Endangered Species Act (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- plants and animals that are Candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17; FR Vol. 61, No. 40, pages 7595-7613. February 28, 1996);
- plants and animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 CCR §15380) which may include species not found on either State or Federal Endangered Species lists;
- plants occurring on Lists 1A, 1B, 2, and 3 and 4 of the California Native Plant Society's (CNPS') *Inventory*. California Department of Fish and Game (CDFG) recognizes that Lists 1A, 1B, and 2 of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFG requests their inclusion in EIRs. Plants occurring on CNPS Lists 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively.¹ Such plants may be included as special-status species on a case by case basis due to local significance and/or recent biological information;
- migratory non-game birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);
- animals that are designated as "Species of Special Concern" by CDFG (1994); or
- animal species that are "fully protected" in California (Fish and Game Code, 3511, 4700, 5050, and 5515).

Special-status plants and animals that are known from coast live oak forest, riparian forest, coastal scrub, and non-native annual grassland habitats in the region are discussed below. Tables 3 and 4 in Appendix C list special-status plants and animals, their legal status, and habitat affinities.

¹Skinner, M.W., B.M. Pavlik (eds.). 1994. Inventory of rare and endangered vascular plants of California, Fifth Edition. Calif. Native Plant Soc. Spec. Publ. No.1. Sacramento, CA. 338 pp.

(1) Special-Status Plants. After reviewing the CNPS *Inventory* and RareFind records, and characterizing habitat present within the proposed project area during the April field reconnaissance, it was determined that 15 special-status plants have potential to occur within the proposed project area. Table 3 in Appendix C lists these plants, their habitat affinities, blooming periods, and known sightings closest to the proposed project area. Table 3 also lists other special-status plants that were considered in this evaluation but rejected based on an absence of suitable habitat on the project site.

Sharsmith's onion (*Allium sharsmithae*) is on CNPS List 1B. This plant has no State or Federal status. CNPS List 1B species are plants that are rare, threatened or endangered in California and elsewhere. All of the plants constituting List 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for State listing. List 1B plants would be protected pursuant to CEQA (14 CCR §15380), and should be fully considered during the CEQA review process.

Sharsmith's onion grows in woodland habitats, often on serpentine soils, where it flowers from March through May. This species was observed at Cedar Mountain in 1993, approximately 25 miles southeast of the project site.¹ Potential habitat for this species occurs in the proposed project site's oak forest community. March through May surveys would have to be conducted to confirm or negate its presence on the project site.

Pallid manzanita (*Arctostaphylos pallida*) is a Federal candidate for listing as threatened or endangered and is a State listed endangered species. This plant is also on CNPS List 1B. Pallid manzanita is found in broad-leaved upland forest, chaparral and woodland habitats, sometimes on siliceous shale. It flowers between December and March; but, may be identified to genus at other times of the year. This species was observed at Redwood Regional Park in 1985, approximately 10 miles northwest of the project site.² Potential habitat for this species occurs in the project site's oak forest community, and surveys during this plant's blooming period would have to be conducted to confirm or negate its presence on the project site.

Big tarplant (*Blepharizonia plumosa* ssp. *plumosa*) is a strongly scented, annual tarplant that is found on dry hills and grassy plains. This species is on CNPS List 1B. It has no State or Federal status. Big tarplant flowers between July and October. Potential habitat for this species occurs within the project site's grassland community, and surveys would need to be conducted during this plant's flowering period to confirm or negate its presence on the project site.

¹Olson, B. 1994. Status of rare, threatened and endangered vascular plants in Alameda and Contra Costa Counties (and some adjacent areas), third edition. California Native Plant Society East Bay Chapter Rare Plant Committee. March 1, 1994.

²Ibid.

Robust spineflower (*Chorizanthe robusta* var. *robusta*) is proposed for Federal listing as endangered, and is on CNPS List 1B. It has no State status. This plant is found in woodland communities near openings, and in coastal scrub, where it flowers from May through September. According to Olson (1994),¹ this species is probably extirpated (i.e., no longer present) from Alameda and Contra Costa Counties. However, since the project site has not been thoroughly surveyed for special-status plants, surveys would need to be conducted during this plant's flowering period to confirm or negate its presence on the project site.

Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*) is on CNPS List 1B. This plant has no State or Federal status. This clarkia is limited in distribution to Pleasanton/Sunol Ridge in Alameda County, Cedar Mountain in Alameda County, and a few locations in San Mateo County.² It occurs in mesic habitats (transition habitats between wetland and upland habitats) and can be expected to occur on north facing slopes in shaded oak woodlands. It flowers from April through July. There is suitable habitat for this species in the project site's oak forest community, and spring surveys would be necessary to confirm or negate its presence.

Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*) is a State listed rare species and a Federal candidate species for listing as threatened or endangered. It is also on CNPS List 1B. This larkspur is found in woodland habitats, typically, but not always with serpentine soils. It flowers from April through June. In 1988, this species was observed on Cedar Mountain, approximately 25 miles southeast of the proposed project site.³ While serpentine soils do not characterize the project site, the oak forest provides potential habitat for this species. Spring surveys would therefore be necessary to confirm or negate its presence on the project site.

Recurved larkspur (*Delphinium recurvatum*) is on CNPS list 1B. This plant has no State or Federal status. This species is found in chaparral scrub, woodland, and valley grassland habitats with alkaline soils. It flowers from March through May. Although habitat on the project site appears to be only marginally suitable for this species (because of the absence of alkaline soils), its presence on the proposed project site cannot be ruled out without conducting spring surveys.

Western leatherwood (*Dirca occidentalis*) is on CNPS List 1B. This plant species has no State or Federal status. This shrub is found in broad-leaved upland forests, closed-cone coniferous forest, and woodland habitats. It flowers from January through April. In 1993, this plant was observed at Redwood Regional Park, approximately 10 miles northwest of the

¹Ibid.

²Ibid.

³Ibid.

proposed project site.¹ The project site provides potential habitat for this species, and surveys would be necessary to confirm or negate its presence.

Talus fritillary (*Fritillaria falcata*) is on CNPS List 1B. It has no State or Federal status. This bulb is found in chaparral, woodland, and coniferous forest communities typically on talus or serpentine substrate. It flowers from March through May. The oak and riparian forest communities on the project site provide potentially suitable habitat for this species, and spring surveys would be necessary to determine its presence or absence on the project site.

Fragrant fritillary (*Fritillaria liliacea*) is on CNPS List 1B. It has no State or Federal status. The bulb from this plant produces one to several fleshy basal leaves around January each year, and flowers between February and April. It is found in a variety of habitats, including coastal prairie, coastal scrub, and valley and foothill grassland, often on serpentine soil. This plant was observed at Fairmont Ridge in 1990, approximately eight miles northwest of the project site.² The project site's grassland community provides potentially suitable habitat for fragrant fritillary, and spring surveys would be necessary to determine its presence or absence.

Diablo helianthella (*Helianthella castanea*) is on CNPS List 1B. It has no State or Federal status. Typically, this plant is found in woodland and grassland communities and flowers from April through June. In 1991, it was observed at Fairmont Ridge, approximately eight miles northwest of the project site.³ The project site's oak and riparian forests, and non-native annual grassland communities provide suitable habitat for this species. Spring surveys would be necessary to confirm or negate this species' presence on the project site.

Santa Cruz tarplant (*Holocarpha macradenia*) is a State listed endangered species and is a Federal candidate for listing as threatened or endangered. This species is also on CNPS list 1B. Santa Cruz tarplant is found in coastal prairie and grassland communities, often on clay soils, where it flowers from June through October. Olson (1994) states that there are no documented naturally occurring, extant populations of Santa Cruz tarplant in Alameda County, that the populations of Santa Cruz tarplant present within Alameda County have all been introduced.⁴

¹Ibid.

²Ibid.

³Ibid.

⁴Ibid.

In August 1995, ESA conducted a survey for Santa Cruz tarplant on portions of the project site originally slated for development.¹ ESA's survey was appropriately timed during Santa Cruz tarplant's known blooming period. Additionally, their survey was conducted after visiting a known population of the tarplant in the Wildcat Canyon area of an East Bay Regional Park and documenting its phenological status (i.e., it was flowering at the time of the reference site visit). ESA's survey covered all suitable tar plant habitats on the project site that were originally slated to be affected by grading and development. No Santa Cruz tarplants were identified during this survey. Since ESA's survey was appropriately timed during the plant's flowering period, and conducted after documenting its phenological stage at a known population, its absence on the portions of the project site surveyed in 1995 has been demonstrated. In July 1997, RMI biologists surveyed the western Roman Catholic Bishop and East Bay Regional Park District (EBRPD) lands that have been added to the development foot-print since ESA's 1995 survey. No Santa Cruz tarplants were identified during RMI's survey.

Robust monardella (*Monardella villosa* ssp. *globosa*) is a CNPS List 1B species. It has no State or Federal status. It is found in chaparral and woodland communities where it flowers from June through July. The East Bay Regional Park District has documented this plant as occurring in Sunol Regional Wilderness,² which is approximately 15 miles southeast of the project site. The oak and riparian forest communities on the project site provide potentially suitable habitat for this species, and surveys would be necessary to confirm or negate its presence.

Mt. Diablo phacelia (*Phacelia phacelioides*) is on CNPS List 1B. It has no State or Federal status. This plant is found in chaparral and woodland habitats with rocky soils. Its presence within Alameda County has not been confirmed.³ Mt. Diablo phacelia flowers from April through May. Suitable habitat for this species occurs in the project site's oak and riparian forest communities, and spring surveys would be necessary to confirm or negate this species' presence.

Adobe sanicle (*Sanicula maritima*) is State designated as rare, and is on CNPS List 1B. It has no Federal status. This perennial herb is found in chaparral, coastal prairie, and grassland habitats with clay or serpentine soils. It flowers from April through May. Adobe sanicle is believed to be extirpated from Alameda County.⁴ The non-native annual grassland

¹ESA (Environmental Science Associates). 1995. Survey Report for Santa Cruz Tarplant (*Holocarpha macradenia*). August 11, 1995. 3 pps.

²Olson.

³Skinner, M.W., B.M. Pavlik (eds.). 1994. Inventory of rare and endangered vascular plants of California, Fifth Edition. Calif. Native Plant Soc. Spec. Publ. No.1. Sacramento, CA. 338 pp.

⁴Olson.

community on the project site may provide suitable habitat for this species. Spring surveys would be necessary to confirm or negate this species' presence.

Showy Indian clover (*Trifolium amoenum*) is on CNPS List 1B. It has no State or Federal status. This clover is found in grassland habitats, sometimes with serpentine soils. It is presumed extirpated from Alameda County.¹ Although the likelihood of this species occurring on the project site is low, suitable habitat for this species is provided by the non-native annual grassland communities found at the site. Therefore, spring surveys would be necessary to confirm or negate this species' presence.

(2) Special-Status Animals. CDFG's RareFind records (CNDDDB 1997) were reviewed for a listing of special-status animals found within five miles of the project site. In addition, information about special-status animals was obtained from other recent environmental documents prepared for the project. This information was used to compile a table of special-status animals (see Table 4 in Appendix C). Wildlife species presented in Table 4 that clearly would not be affected by the project are not discussed further in text. Such species are included in Table 4 in response to USFWS and/or CDFG requests that the potential presence of these species on or immediately adjacent to the project site be addressed. Special-status animals presented in Table 4 that do or could potentially occur in habitats found on the project site, and that have potential to be affected by the project, are discussed in detail below.

California tiger salamander (*Ambystoma californiense*) (CTS) is a Federal candidate for listing as threatened or endangered. In April 1994, the U.S. Fish and Wildlife Service (USFWS) determined that listing this species as threatened or endangered was "warranted," however, "precluded listing" this species pending listing actions for higher priority species.² This means that USFWS could, at any time, issue a "proposed rule" designating CTS as threatened or endangered. CTS is also a California "species of special concern." This title affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), this species would be considered rare. Pursuant to its rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment," pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, CTS must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency (e.g., the U.S. Army Corps of Engineers). CTS is also protected under Title 14 of the California Code of Regulations (CCR).

CTS occurs in grasslands and open oak woodland that provide suitable aestivation (i.e., summer retreats) and/or breeding habitats. CTS spend the majority of their lives underground

¹Ibid.

²U.S. Fish and Wildlife Service (USFWS). 1994. Endangered and threatened wildlife and plants; 12-month petition finding for the California tiger salamander. Federal Register, Vol 59, No. 74, pp. 18353-18355.

in California ground squirrel (*Spermophilus beechyi*) or Botta's pocket gopher (*Thomomys bottae*) burrows, or in other suitable aestivation retreats. They emerge from their burrows for only a few nights each year during the rainy season to migrate to their breeding ponds. Seasonal wetlands, vernal pools, or slow-moving, calm streams that typically do not support fish, bullfrogs (*Rana catesbiana*), red swamp crayfish (*Procambarus clarkii*), or signal crayfish (*Pacifastacus leniusculus*) provide suitable breeding habitat. Breeding ponds and streams usually hold water through the month of May to allow time for larvae to fully metamorphose. Loss of wetlands, especially vernal pool habitats, is regarded as the principal cause of CTS population declines.

The closest known occurrence of CTS to the project site is at Tolman Peak, approximately 2.5 to 3.0 miles southwest of the project site. Approximately 20 CTS were observed in a pond at Tolman Peak in 1996.¹ RMI conducted nocturnal spotlighting surveys and diurnal (i.e., daytime) dip-netting/seining surveys for CTS on the project site in 1996.² RMI's survey methodologies were developed in close consultation with CDFG personnel.³ Nocturnal surveys were conducted on January 16, 30, and February 21, during stormy weather periods with high humidity when soils were completely saturated. Diurnal surveys were conducted on March 22 and May 6. The ponds, drainages, and main development area on the northeast side of the project site were surveyed. During nocturnal surveys, a large population of adult California newts was identified at the ponds and in the drainages. During dip-netting/seining surveys, only Pacific tree frog and California newt larvae were identified, and thousands of California newt egg masses were identified in the bottom of ponds. No CTS adults, larvae, or eggs were identified during these surveys.

Although the presence of California newt does not preclude the presence of CTS, these two species typically do not have overlapping habitats or territories. California newts are typically found in more wooded habitats than CTS. Hence, since neither CTS adults nor larvae were identified on the project site during appropriately timed surveys, and California newt, a woodland species, was observed in large numbers, it is unlikely that CTS occur on the project site.

California red-legged frog (*Rana aurora draytonii*) is a Federal listed threatened species. This frog is also a California "species of special concern." This title affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), this species would be considered rare. Any unmitigated impacts to rare species would be

¹Joe DiDonato, East Bay Regional Park District; personal communication, June 12, 1997.

²RMI (Resource Management International, Inc.). 1996. Updated Status Report on Tiger Salamander and Red-Legged Frog Surveys, Walpert Ridge/Hayward 1900 Property. August 12, 1996. 4 pps.

³Ibid.

considered a "significant effect on the environment," pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines.

The California red-legged frog (CRLF) is a habitat specialist. Adult CRLFs typically require dense, shrubby or emergent riparian vegetation closely associated with deep, still or slow moving water.¹ This frog can also be found in ephemeral (i.e., temporary) streams when the stream retains pools (plunge pools to escape predators) or saturated soils somewhere in the stream system year round. Bullfrogs (*Rana catesbiana*), red swamp crayfish (*Procambarus clarkii*), signal crayfish (*Pacifastacus leniusculus*), bass (*Micropterus* spp.), mosquitofish (*Gambusia affinis*), and Centrarchid fish (sun fish) are known predators.²

Both CDFG and RMI identified CRLFs in ponds on the project site. CRLF has been identified in seven of the 16 ponds on the project site. Although CRLF has not been identified in the drainages on the project site, some of the drainages flow into and out of the ponds, providing plunge pools and migration corridors. Therefore, "all 16 ponds and the drainages provide [suitable] habitat for CRLF, and likely will be considered as such by the resource agencies."³

Western pond turtle (*Clemmys marmorata*) is a Federal "species of concern" and State "species of special concern." Federal "species of concern" were formerly called category 2 candidate species. Federal species of concern are those species for which there are not enough data to support a listing proposal at this time, and further research and field study are needed. California "species of special concern" are considered rare pursuant to the CEQA Guidelines (14 CCR §15380). Because of its rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment," pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, western pond turtle must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

This turtle is a habitat generalist, inhabiting a wide range of fresh and brackish, permanent and intermittent water bodies from sea level to about 4,500 feet above sea level.⁴ This turtle

¹Jennings, M.R., M.P. Hayes, and D.C. Holland. 1992. A petition to the U.S. Fish and Wildlife Service to place the California red-legged frog and the western pond turtle on the list of endangered and threatened wildlife and plants. 21 pp.

²Ibid.

³RMI (Resource Management International, Inc.). 1996. Updated Status Report on Tiger Salamander and Red-Legged Frog Surveys, Walpert Ridge/Hayward 1900 Property. August 12, 1996. 4 pps.

⁴U.S. Fish and Wildlife Service (USFWS). 1992b. Endangered and threatened wildlife and plants; commencement of status review for a petition to list the western pond turtle and California red-legged frog. Federal Register, Vol. 57, No. 193, pp. 45761-45762.

also requires upland areas for burrowing habitat. It eats plants, insects, worms, fish and carrion (i.e., dead animals).¹ There are no CNDDDB records for western pond turtle within the vicinity of the project site. In March and May 1996, RMI conducted surveys for western pond turtle concurrently with their diurnal (i.e., daytime) surveys for amphibians. Surveys entailed searching pond margins and prospective basking sites (e.g., submerged logs, rocks) for turtles. No western pond turtles were identified in any of the water bodies on the project site during RMI's surveys.

Alameda Whipsnake (*Masticophis lateralis euryxanthus*) is a State listed threatened species and is proposed for Federal listing as endangered. Typically, the Alameda whipsnake is found in northern coastal scrub or chaparral communities. These two habitats are more favored by this snake when they occur adjacent to ungrazed grassland or oak woodland savannah (i.e., grassland with scattered oaks) where rodent populations are high. Rodents are not considered prime prey, but their burrows are favorite retreat areas for this snake.² Grasslands are also considered an important habitat component because of their foraging value, and some female whipsnakes have been identified laying eggs in grassy fields.³ Rock outcrops are considered especially important hunting habitat for this snake. Western fence lizard is the primary prey species and prime habitats have high populations of this lizard.

The presence of this snake on the project site has been documented by a trapping survey conducted from June 15 through July 31, 1985.⁴ In addition, the presence of the whipsnake has been documented immediately to the west of the project site on the Bailey property.⁵ McGinnis (1995) revisited the specific trapping locations from the 1985 study of the project site and visited additional areas that had been added to the development envelope since the

¹Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. Houghton Mifflin Company, Boston, MA., 279 pp.

²McGinnis, S.M. 1990. The Status of the Alameda Whipsnake (*Masticophis lateralis euryxanthus*) on the Bailey Ranch, Hayward, California. Prepared for Environmental Sciences Associates, San Francisco, California.

³Swaim, K. 1996. Alameda Whipsnake. Presentation given to the San Francisco Bay Area Chapter of the Wildlife Society on October 27, 1996.

⁴McGinnis, S.M. 1985. A Study to Determine the Presence or Absence of the Alameda Striped Race (*Masticophis lateralis euryxanthus*) on Walpert Ridge, Hayward, California. August 4, 1985. 12 pps.

⁵McGinnis, S.M. 1990. The Status of the Alameda Whipsnake (*Masticophis lateralis euryxanthus*) on the Bailey Ranch, Hayward, California. Prepared for Environmental Sciences Associates, San Francisco, California.

original study to determine if prime habitat for the whipsnake was present at these locations.¹ Of the areas analyzed, McGinnis identified two locations on the western edge of the project site as potential whipsnake habitat. These areas are located (1) immediately west of the Carden property, and (2) on the western edge of the project site near the junction of property lines of the Roman Catholic Bishop, EBRPD, and Hayward 1900 parcels.² Since Alameda whipsnake has been identified on the project site, avoidance of this snake and its habitat, or mitigation for impacts to it and its habitat, will be required by CDFG and USFWS.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) is a Federal "species of concern" and is a California "species of special concern." Although this woodrat is not State or Federally listed as threatened or endangered, California "species of special concern" are considered rare pursuant to the CEQA Guidelines (14 CCR §15380). Pursuant to its rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment," pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, this woodrat must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

The San Francisco dusky-footed woodrat is found in evergreen riparian communities where it builds large stick nests either on the ground or in the trees. The type locality for this subspecies of woodrat was established in the Portola Valley in San Mateo County.³ This subspecies' range extends throughout the south and east San Francisco Bay area.⁴

During Monk & Associates' half-day field reconnaissance on April 23, 1997, a woodrat nest was identified in Section 32 of the project site under a lone coast live oak tree (arborist tag number 68) adjacent to a Native American mortar. This woodrat nest is outside of the area currently proposed for development. Therefore, it will not be impacted by the development. However, since the presence of dusky-footed woodrats on the project site has been demonstrated, there may be other woodrats present on the project site that may be affected by the development. Therefore, in accordance with comments provided by CDFG on the

¹McGinnis, S.M. 1995. An Analysis of Habitats Within the Hayward 1900 Walpert Ridge Project Site That Exhibit Potential for Supporting the Threatened Alameda Whipsnake. Prepared for Sheppard, Mullin, Richter & Hampton, San Francisco, California. 13 pps.

²LSA. 1995. Planting Implications of Alameda Whipsnake Presence at Hayward 1900, Alameda County. 5 pps.

³Hall, E.R. 1981. The Mammals of North America. Volume II. Second Edition. John Wiley & Sons, New York.

⁴Ibid.

Notice of Preparation for the project,¹ all oak and riparian forest habitat within the proposed development area should be surveyed at the earliest opportunity to determine presence or absence of this woodrat, so that any necessary avoidance or mitigation measures may be established well before construction.

Greater western mastiff bat (*Eumops perotis californicus*) is a Federal "species of concern" and a State "species of special concern." This bat is an uncommon resident in the coastal ranges from south San Francisco Bay southward and in the southeastern San Joaquin Valley. It occurs in many open, semi-arid to arid habitats, including deciduous woodlands and annual grasslands.² Cliff faces, high buildings, and trees are used for roosting. Tight rock crevices at least 35 inches deep and two inches wide, or crevices in buildings, are required for maternity roosts. Since trees on the project site provide suitable roosting habitat for greater western mastiff bats, surveys would be necessary to determine their presence/absence on the project site.

Pacific western big-eared bat (*Plecotus townsendii*). This bat species is a Federal "species of concern" and is a California "species of special concern." This bat is found throughout California in all but subalpine and alpine habitats. It requires caves, mines, tunnels, buildings, or other human-made structures for roosting and for maternity sites. The Hayward Hills wildlife study³ reports this bat as occurring in the Walpert Ridge area. However, since the Hayward Hills wildlife study covered the project site and surrounding areas, it is not clear whether or not this bat actually occurs on the project site. Nonetheless, since old barns and sheds on the project site may provide suitable roosting and/or maternity habitat for this bat species, surveys would be necessary to determine their presence/absence on the project site.

Myotis bats (*Myotis ciliolabrum*, *M. evotis*, *M. thysanodes*, *M. volans*, and *M. yumanensis*) are Federal "species of concern" and State "species of special concern." All five of these species' ranges extend into Alameda County. These species of myotis are known to roost in trees, typically under loose bark. Two of these species, *M. volans* and *M. yumanensis*, are more common in forest habitats than the other three species; however, all five species have been recorded in woodland and forest habitats at elevations ranging from sea level to 7,000 feet. Since there is suitable habitat for these five species on the project site, surveys would be necessary to determine their presence/absence on the project site.

¹CDFG. 1997. Response to the Notice of Preparation (NOP), Blue Rock Country Club Draft Environmental Impact Report (EIR), SCH #97072028, Alameda County. August 4, 1997.

²Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990b. California's wildlife, volume III, mammals. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

³City of Hayward. 1977a. Hayward Hills Area Wildlife Study. Hayward Planning Department. December 1977. 93 pps.

Golden eagle (*Aquila chrysaetos*) is designated as a California "species of special concern." This title affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), this species would be considered rare. Pursuant to its rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment," pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. The golden eagle is also fully protected under the Bald Eagle Protection Act (16 U.S.C. 668-668c), and the Migratory Bird Treaty Act (50 CFR 10.13). Its nest, eggs, and young are also protected under California Fish and Game Codes (§3503 and §3503.5). Typically, golden eagles nest in trees with commanding views, usually oaks, conifers, or eucalyptus, or on high, rocky cliffs. This species is particularly susceptible to disturbance and usually nests in undisturbed areas. In trees, nests are constructed of large sticks near the trunk of the tree. Often nests are reused in subsequent years. Golden eagles can often be seen hunting on and near Walpert Ridge, or perched on tall trees or transmission towers.¹ RMI also reports having seen golden eagles hunting on the project site.² A golden eagle nest occurs in Garin Regional Park, approximately 2,100 feet west of the limits of project site grading. This nest was confirmed active in May 1997.³ The project site provides suitable nesting habitat for golden eagles. Hence, the year construction is proposed on the project site spring nesting surveys (May) would be necessary to confirm or negate this species' presence.

Cooper's hawk (*Accipiter cooperii*) is a California "species of special concern." CDFG is primarily concerned with this species' nesting habitat. This raptor is also protected under the Migratory Bird Treaty Act (50 CFR 10.13). Its nest, eggs, and young are also protected under California Fish and Game Codes (§3503, §3503.5, and §3800). This hawk typically nests in heavily wooded areas along streams, rivers, or in close proximity to springs. This species prefers to nest in tall canopies with an open understory, usually on a south, west, or east facing slope, near openings. The coast live oak forest and riparian forest communities provide suitable habitat for Cooper's hawks. Therefore, the year construction is proposed on the project site, a late-spring (May, June) survey would be necessary to confirm or negate this species' presence.

Sharp-shinned hawk (*Accipiter striatus*). The sharp-shinned hawk is a California "species of special concern." This title affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), this species would be considered rare. Pursuant to its rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment," pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. This raptor is also protected under the Migratory Bird Treaty Act (50 CFR 10.13).

¹ESA (Environmental Science Associates). 1991. Walpert Ridge Specific Area Plan: Environmental Impact Report. Draft. February 22, 1991.

²RMI (Resource Management International, Inc.). 1997. Blue Rock Country Club 1.6 Mile Grading and Lot Plan - Biological Resources. May 22, 1997. 13 pps.

³DiDonato.

Its nest, eggs, and young are also protected under California Fish and Game Codes which protect nesting raptors (§3503, §3503.5, and §3800). The sharp-shinned hawk typically nests in heavily wooded areas, near open habitats, sometimes near streams, rivers, or in close proximity to spring or seeps. Sharp-shinned hawks are typically found nesting in more densely wooded areas than Cooper's hawks. This species nests in thick tree canopies often with shrubby understories. Nests are constructed of sticks and are built near the trunk of a tree. In the Bay Area, sharp-shinned hawks nest from April through July. Nesting sharp-shinned hawks occur at Garin Regional Park; one nest is approximately 1,400 feet west of the limits of project site grading.¹ The oak forest and riparian habitats found on the project site provide suitable nesting and hunting habitat for the sharp-shinned hawk, and spring surveys would be necessary prior to any grading or construction.

Northern harrier (*Circus cyaneus*) is designated by the State of California as a "Species of Special Concern." CDFG is primarily concerned with this species nesting habitat. This raptor is also protected under the Migratory Bird Treaty Act (50 CFR 10.13). California Fish and Game Codes (§3503, §3503.5, and §3800) protect nesting raptors and their eggs/young. Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators while nesting, and is subject to disturbance by agricultural practices. The non-native annual grassland habitat on the project site provides potential nesting and hunting habitat for the northern harrier. Hence, the year construction is proposed for the project site, a spring nesting survey should be conducted to confirm or negate its presence.

White-tailed kite (*Elanus caeruleus*) is fully protected under the California Fish and Game Code. Fully protected birds may not be "taken" or kept in captivity at any time (§3511). This raptor is also protected under the Migratory Bird Treaty Act (50 CFR 10.13). The white-tailed kite is typically found hunting in grassland, marsh, or cultivated fields where there are dense-topped trees or shrubs for nesting and perching. They nest in a wide variety of trees of moderate height and sometimes in tall bushes, such as coyote bush (*Baccharis pilularis*). Native trees used are live and deciduous oaks (*Quercus* spp.), willows (*Salix* spp.), cottonwoods (*Populus* spp.), sycamores (*Plantanus* spp.), maples (*Acer* spp.), toyon (*Heteromeles arbutifolia*), and Monterey cypress (*Cupressus macrocarpa*). Although the surrounding terrain may be semiarid, kites often reside near water sources, where prey are more abundant. The particular characteristics of the nesting site do not appear to be as important as its proximity to a suitable food source.² Kites primarily hunt small mammals,

¹DiDonato.

²Shuford, W.D. 1993. The Marin County breeding bird atlas: A distributional and natural history of coastal California birds. California avifauna series 1. Bushtit books, Bolinas, California.

with California meadow voles (*Microtus californicus*) accounting from between 50-100% of their diet.¹

White-tailed kites have been observed in the area; however, no nesting surveys for this species have been conducted on the project site. In the absence of a nesting survey, the presence of white-tailed kites on the project site cannot be dismissed. Therefore, the year construction is proposed for the project site, a spring nesting survey should be conducted to confirm or negate this species' presence.

Burrowing owl (*Athene cunicularia*) is a Federal "species of concern" and is a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Codes (§3503, §3503.5, and §3800). The burrowing owl is also protected under the Migratory Bird Treaty Act (50 CFR 10.13). Burrowing owl habitat can be found in annual and perennial grasslands characterized by low-growing vegetation. The burrowing owl utilizes rodent burrows, typically ground squirrel burrows, for nesting and cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of a pair of burrowing owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow.

The grasslands found on the project site are open, savanna habitat types that are surrounded by woodland communities. These grasslands do not appear to provide the typical low grassland habitat used by burrowing owls. Although the project site does not appear to provide optimum habitat conditions for burrowing owls, and none were observed during RMI's surveys for other special-status species, owls could move onto the project site in the future and take up residence. Hence, pre-construction surveys would be necessary to ensure that no burrowing owls would be affected by development on the site.

Tricolored blackbird (*Agelaius tricolor*) is a Federal "species of concern" and a State "species of special concern." A gregarious species, the tricolored blackbird is typically found near freshwater, particularly near marsh habitat. Loss of wetland habitats is regarded as the principal factor responsible for this species population decline.² Nesting colonies are typically found in stands of cattail (*Typha* spp.) and bulrush (*Scirpus* spp.), although they are also known to utilize blackberry patches (*Rubus* sp.) and thistle clumps (*Cirsium* spp. and *Cynara* spp.) adjacent to water. Flooded lands, margins of ponds, and grassy fields in summer and winter provide typical foraging habitat for this species. Some of the wetlands on the project site provide suitable nesting habitat for tricolored blackbird colonies (cattails, thistles, etc.),

¹Ibid.

²Beedy, E.C. 1992. Breeding status, distribution, and habitat associations of the tricolored blackbird (*Agelaius tricolor*), 1850-1991. Paper presented at the Western Section of the Wildlife Society Annual Meeting, February 1992. San Diego, California.

therefore, the species' presence on the project site cannot be dismissed without conducting a preconstruction nesting survey.

d. Local Plans and Policies

(1) Conservation and Environmental Protection Element. The *Conservation and Environmental Protection Element* of the City of Hayward General Plan¹ establishes extensive policies (both general and specific to the hill areas) to preserve and protect wildlife and vegetation. Policies include preserving the native vegetation or replanting with native plants; protecting root systems of trees; protecting riparian corridors; protecting important wildlife habitats; minimizing the use of toxic chemicals; minimizing hill development; limiting grading in hill areas; concentrating development to preserve open space; and containing domestic animals.

(2) Tree Ordinance. The City of Hayward has adopted an ordinance to protect trees occurring within the city limits; this ordinance generally addresses the preservation of trees in urban areas, and does not specifically address rural areas such as Walpert Ridge. Nonetheless, it provides guidance for tree removal. The ordinance states that all trees measuring 30 inches in circumference at 24 inches above ground level are protected. If a tree meeting this criterion must be removed, a Tree Removal Permit must be obtained from the City of Hayward Planning Department prior to removal activities. A tree replacement program would be developed by the City Landscape Architect based on the health, location, size, and species of trees removed, based on a commonly used formula for assessing a tree's value.² This ordinance does not establish a process for determining appropriate mitigation measures for trees removed during project development.

(3) City of Hayward Design Guidelines. The City's Design Guidelines require creek setbacks to preserve riparian vegetation. By preserving riparian vegetation, erosion is controlled and runoff is minimized. These guidelines also state that installation of culverts should be avoided. The Guidelines further specify that healthy, mature plant material, especially large trees, should be retained to the greatest extent possible; that a certified arborist should develop a preservation program for significant trees; that the root zone (determined by the drip line of the tree) should be protected; and that compaction of tree roots by heavy equipment should be avoided. The Guidelines require that removed trees be replaced with box specimens.³

¹City of Hayward. 1977b. Conservation and Environmental Protection Element. City Council Resolution 77-103. Revised September 12, 1978. City Council Resolution 78-311.

²City of Hayward. 1971. Preservation of Trees. Ordinance Number 71-038 C.S. Adopted June 22, 1971.

³City of Hayward. 1993. Design Guidelines. City of Hayward Planning Department. Adopted November 9, 1993.

e. Regulatory Requirements

This subsection presents an overview of the criteria used by the U.S. Army Corps of Engineers, California Regional Water Quality Control Board, CDFG, and the State Water Resources Control Board to determine those areas of development sites that are subject to their regulation. It also provides details about specific areas of the project site that would be subject to regulation by these agencies.

(1) U.S. Army Corps of Engineers Jurisdiction and General Permitting. Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). In the recent past, this agency also regulated the excavation of soil or other materials from "waters of the United States" (Federal Register: 58 FR 45008, August 25, 1993). However, the Corps is not currently regulating excavation of soil from regulated areas.

Results of Preliminary Wetland Assessment of the Project Site. The wetlands assessment is based on LSA's January 18, 1996, Section 404 jurisdictional map (verified by the U.S. Army Corps of Engineers on May 8, 1996) and additional field mapping conducted by RMI in March 1997 for the expanded project development envelope including the EBRPD and Roman Catholic Bishop properties (see Wetlands Map, Figure 22). From these two wetlands assessments, the applicant has identified a total of 23.52 acres of potential Section 404 jurisdictional areas on the project site. However, as of this writing, RMI's map has not been verified by the Corps, and only the Corps can make a final determination as to what falls under their jurisdiction. The proposed revised development plan would affect an estimated nine to 11 acres of Section 404 jurisdiction.¹ These wetland areas would be filled as a result of onsite grading for housing and the golf course. A permit from the Corps would be required prior to development in these areas.

Background Regarding Section 404 Permitting Requirements. In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3). Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section

¹RMI (Resource Management International, Inc.). 1997. Blue Rock Country Club 1.6 Mile Grading and Lot Plan - Biological Resources. May 22, 1997. 13 pps.

328.3[e]). Wetlands are defined as "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise affecting "waters of the United States." In many cases, the Corps must visit a proposed project site (to conduct a "jurisdictional determination") to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project site. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to "waters of the United States."

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to the type of "waters of the United States" found on the project site: (1) use of Nationwide Permit(s) (NWP), or (2) application to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments). In addition, the application must contain an "alternatives analysis." This permit may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under an NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 13 general nationwide permit conditions, nine Section 404-only conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (i.e., receive "verification" from the Corps).

The Corps maintains a policy of "no net loss" of wetlands (waters of the United States) from urban development. Therefore, it is incumbent upon applicants for projects that would affect Corps-regulated areas to submit a mitigation plan that demonstrates the affected areas would be recreated (i.e., impacts would be mitigated). Typically, the Corps requires mitigation to be "in-kind" (i.e., if a stream channel would be filled, mitigation would include replacing it with a

new stream channel), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction thereof recreated for each acre or fraction thereof lost). In some cases, the Corps allows "out-of-kind" mitigation if the compensation site has greater value than the affected site.

Concerning the proposed project site, if project designs call for filling any intermittent drainages, required mitigation would involve recreating the same approximate jurisdictional area (same stream widths) on a different part of the project site.

(2) California Regional Water Quality Control Board (CRWQCB) Requirements. The CRWQCB regulates activities in wetlands and other waters through Section 401 of the Clean Water Act. State water quality certification pursuant to Section 401 of the Clean Water Act, or waiver thereof, is required prior to the issuance or reissuance of Corps NWP or Individual permits authorizing activities which may result in a discharge into waters of the United States (33 CFR Section 330.4[3][c]).

The applicant would be required to obtain a water quality certification, or waiver thereof, from the CRWQCB to meet all conditions of any NWP or Individual Permit authorized by the Corps for the project.

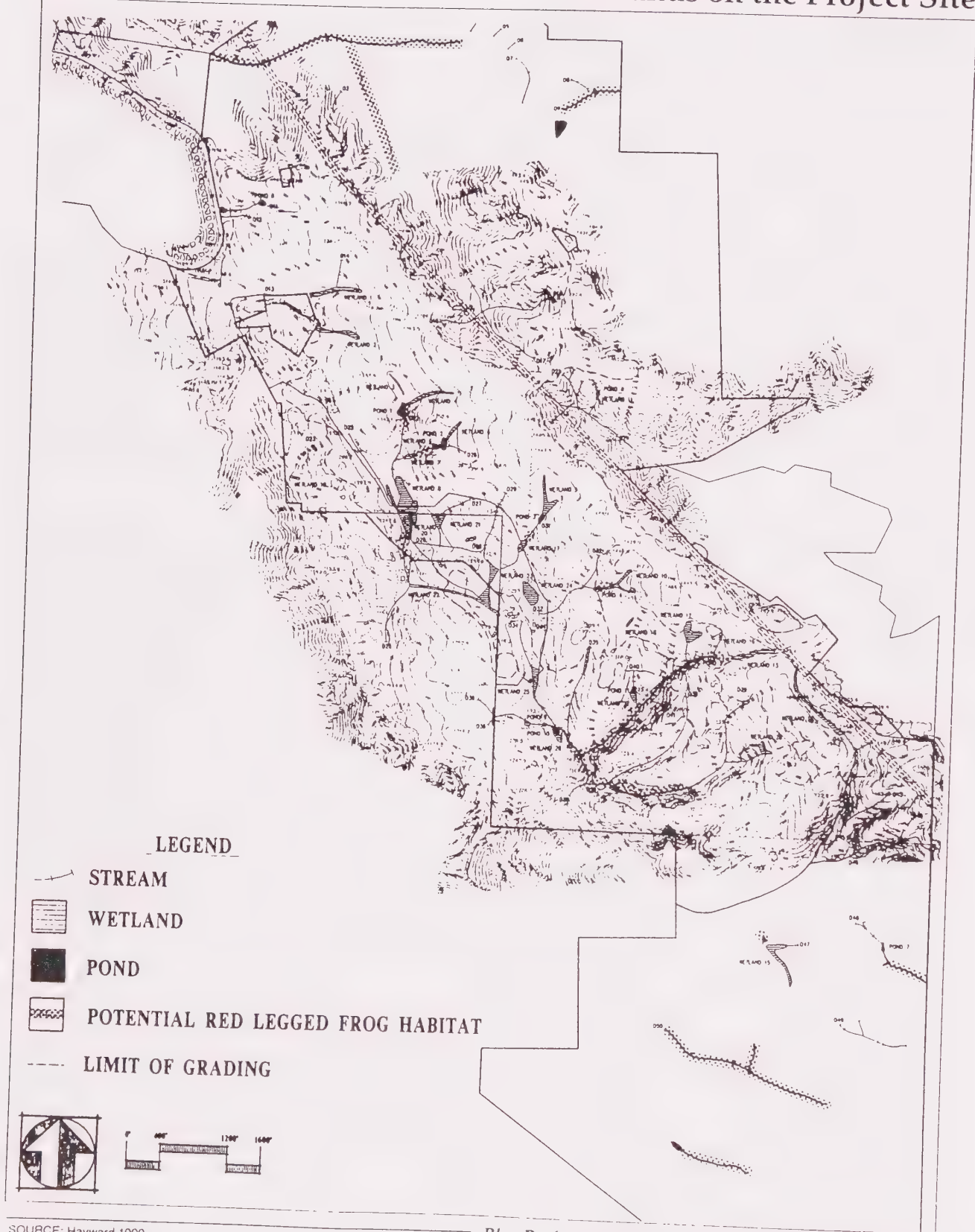
(3) California Department of Fish and Game Requirements. Under Sections 1601-1603 of the California Fish and Game Code, CDFG regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream or its riparian vegetation. Any proposed activity that would result in any of these modifications to a natural stream channel would require the applicant to enter into a Streambed Alteration Agreement (SBAA) with CDFG prior to commencing with work in the stream. However, prior to authorizing such permits, CDFG typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts, and engineering and erosion control plans. When reviewing proposed development plans, CDFG examines stream setback proposals, and typically requires setbacks of 25 to 100 feet from the "top-of-bank." CDFG also requires 3:1 mitigation for impacts to riparian vegetation (i.e., three trees/shrubs must be planted for each tree/shrub removed).¹ When proposed projects would not result in significant adverse biological impacts, or if such impacts would be adequately mitigated to a level considered less-than-significant, CDFG will enter into a SBAA with project applicants. The SBAA presents conditions that the applicant must follow to remain in compliance with Fish and Game Code.

(4) State Water Board - National Pollutant Discharge Elimination System Requirements. In 1972, the Clean Water Act was amended to provide that the discharge of pollutants to "waters of the United States" from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the Clean Water Act added Section 402(p), which establishes a framework for

¹CDFG (California Department of Fish and Game). 1997. Letter to H. Hom, City of Hayward, Notice of Proposed Project, Blue Rock Country Club. April 8, 1997.

Figure 22

Wetlands on the Project Site



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

regulating municipal and industrial storm-water discharges under the NPDES program. Currently, Environmental Protection Agency (EPA) regulations stipulate that all construction activities that disturb more than five acres of land surface must have an NPDES permit. Stormwater discharges from a construction activity that result in a land disturbance of less than five acres, but which is part of a larger common plan of development or sale, also require a permit.

In the State of California, the State Water Resources Control Board has been delegated authority to administer NPDES by issuing a general permit. Compliance with the general permit requires (1) submittal of a "Notice of Intent" (NOI) prior to start of work; (2) preparation of a Stormwater Pollution Prevention Plan (SWPPP) prior to start of work; (3) implementation of a self-monitoring program; (4) submittal of annual reports and certification of compliance; and (5) payment of an annual fee (\$250 to \$500) during construction. Upon completion of construction activities a Notice of Termination must be submitted.

Development on the project site that would involve grading or other alteration of five or more acres would require authorization from the State Water Resources Control Board under NPDES permit.

2. IMPACT AND MITIGATION FINDINGS – 1991 SPECIFIC AREA PLAN EIR

Table 10 summarizes vegetation and wildlife impacts and mitigation measures identified in the 1991 EIR.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Significance Criteria

Significance of project impacts is determined using CEQA Guidelines, and regulations established by Federal, State, and local agencies. Direct and indirect adverse impacts to biological resources are classified as significant, potentially significant, or less-than-significant based on these criteria. For purposes of evaluating impacts, biological resources are grouped into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels. Significance criteria for impacts in these categories are discussed below.

(1) Vegetation. Adverse impacts on general vegetation types are normally considered *significant* if the project would directly or indirectly:

- substantially change the diversity or number of any species of native plants (including tree, shrubs, grasses, and aquatic plants);

Table 10
1991 EIR VEGETATION AND WILDLIFE IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 housing units on 310 acres in the sub-area within 1.5 miles of Fire Station No. 5 would eliminate native plant and animal habitats and introduce non-native plants and animals that could affect natural populations, including the Alameda whipsnake, a State listed threatened species.

Mitigation Summary

During construction: (1) reestablish ground cover immediately following construction; (2) provide erosion control; (3) fence mature trees, rock outcrops, and other sensitive areas; (4) restrict construction to dry seasons; and (5) require that graded soils be hydromulched, and that wooded area be included in open space protected by a 100-foot buffer.

In addition: (1) perform a wetland delineation; (2) survey and avoid areas found to support either the Alameda whipsnake or the Santa Cruz tarplant; (3) inventory existing trees over 30 inches, and preserve significant trees and replace trees authorized for removal; (4) retain major rock outcrops and preserve remaining open space areas; (5) dedicate undeveloped lands for public use (e.g., to the East Bay Regional Park District); (6) use drought-tolerant native species of trees and shrubs; (7) provide silt traps or settlement basins; and (8) prohibit use of herbicides and pesticides, and limit fertilizers in common-area landscaping.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- result in a barrier to the natural replenishment of existing species;
- result in the substantial reduction or alteration of sensitive plant communities. These would include plant communities of local, State, or Federal interest because of limited distribution or other biological significance; or
- result in the introduction of new species of plants into an area or provide conditions suitable for expansion of populations of exotic plant species.

(2) Wildlife. Adverse impacts on wildlife resources are normally considered *significant* if the physical habitat disturbance or associated human activity would:

- substantially change the diversity or numbers of any species of animal, or interfere with the survival, growth, or reproduction of a substantial proportion of a wildlife or fish population;
- result in the introduction of new species of animals into an area;
- substantially interfere with the movement of any resident or migratory animals; or
- result in the substantial deterioration of existing wildlife habitat.

(3) Special-Status Species. This impact category addresses a broad range of species designated as "special-status species" by local, State, or Federal agencies (please refer to the definition of a special-status species provided earlier in this section). Adverse impacts are considered *significant* if the project would:

- reduce the numbers of any unique, rare, threatened or endangered species of plants or animals;
- result in habitat modification or degradation that significantly impairs essential behavioral patterns, including breeding, feeding or sheltering; or
- result in the permanent loss of habitat essential for the continued existence of a special-status species.

A *potentially significant* designation is used under circumstances where the presence of a special-status species or resource was uncertain and project construction could result in its loss. This designation is also used if it is unclear if the proposed project would result in a significant adverse impact, but the likelihood is great. *Less-than-significant* impacts are those impacts not considered either significant or potentially significant. Impacts would be generally considered less-than-significant if the habitats and species affected are common and widespread in the region and in the State.

(4) "Waters of the United States" and/or Stream Channels. Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the Corps regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330), and the excavation of soil or other materials from "waters of the United States" (Federal Register: 58 FR 45008,

August 25, 1993). Any unauthorized and unmitigated impacts on Corps-regulated areas on a project site would be considered a *significant adverse impact*.

Under Sections 1601-1603 of the California Fish and Game Code, CDFG regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream or its riparian vegetation. Any proposed activity that would result in any of these modifications to a natural stream channel without prior authorization from CDFG would be considered a *significant adverse impact*.

b. Impacts and Mitigation Measures

NOTE: The following impact and mitigation findings, which focus on "project-level" impacts that would result from development of the currently proposed preliminary development plan, are intended to replace those identified in the 1991 EIR, which analyzed "plan-level" development on Walpert Ridge.

The project proposes residential and golf course development on an approximately 1,635-acre site. Of the 1,635-acre total, 1,558 acres are owned by Hayward 1900 (the applicant), 57 acres are owned by the Roman Catholic Bishop of Oakland, and approximately 20 acres are owned by the East Bay Regional Park District (EBRPD). The applicant currently proposes to dedicate approximately 1,000 acres of Hayward 1900-owned property on the project site to the EBRPD in exchange for the 20 acres of EBRPD-owned property. Alternatively, the approximately 1,000 acres may be dedicated to another public agency, deeded to the local homeowners' association, or retained by Hayward 1900 as open space. Dedication and/or preservation of the 1,000-acre area to open space use, in combination with landscaped/open space areas within the proposed residential clusters, would bring the total proposed open space area on the project site to approximately 1,100 acres.

The proposed project would include 650 single-family dwellings, an 18-hole golf course, a private tennis and swim club, and an 11.3-acre joint elementary school/neighborhood park site. The residential clusters would encompass approximately 145 acres, and the golf course and associated areas would encompass approximately 333 acres. Private neighborhood parks would encompass approximately 6.5 acres.

Project Impacts on Non-Native Annual Grassland. Approximately 381 acres of the approximately 1,120 acres of non-native annual grassland habitat on the project site would be affected by the project as currently proposed. Impacts include loss of herbaceous species due to grading the project site for buildings, the golf course, and roads. Since the plants that would be affected are common species, and most of them are not native to California, these project impacts would be considered *less-than-significant* (see category (1) under "a. Significance Criteria" above).

Mitigation for Project Impacts on Non-Native Annual Grassland. No significant impacts have been identified; no mitigation is required.

Project Impacts on Central Coast Live Oak Riparian Forest. The project does not propose development within the approximately 11.40 acres of Central Coast live oak riparian forest that exists on the project site. The project would therefore have a ***less-than-significant impact*** on this plant community (see category (1) under "a. Significance Criteria" above).

Mitigation for Project Impacts on Central Coast Live Oak Riparian Forest. No significant impacts have been identified; no mitigation is required.

Impact VW-1: Project Impacts on Coast Live Oak, Valley Oak, California Bay, and Big Leaf Maple Trees. Construction of the project would require removal of coast live oaks, valley oaks, California bays, and big leaf maple trees, many of which are greater than six inches in diameter at breast height (4.5 feet above grade). Removal of these trees would reduce the number of large trees on the site, would reduce avian and mammalian nesting opportunities, and would reduce wildlife cover, representing a ***significant impact*** (see categories (1) and (2) under "a. Significance Criteria" above).

According to MacNair & Associates (1997), the two ravines east and west of the existing access road to the microwave station support dense stands of coast live oak, California bay, and occasional big leaf maple trees. MacNair & Associates estimates that the density of trees in these ravines ranges from 25 to 75 trees per acre.¹ However, estimating the total number of trees that would be affected under the proposed project would be extremely difficult due to the steep slopes and dense scrub vegetation in the north section of the project site.²

In order to determine an accurate count of the number of trees to be removed, it would be necessary to track tree removal as trees are cleared.

¹MacNair & Associates. 1997. Walpert Ridge/Hayward 1900 - Review of Concept Mass Grading and Layout Plan and Associated Tree Impact. March 21, 1997. 3 pps. plus attachments.

²MacNair & Associates. 1997. Walpert Ridge/Hayward 1900 - Review of Concept Mass Grading and Layout Plan and Associated Tree Impact. May 22, 1997. 3 pps.

Mitigation VW-1: Redesign the project to avoid coast live oaks, valley oaks, California bays, and big leaf maple trees, as feasible; and require preparation of a *Tree Preservation and Management Plan* that includes provisions for tree replacement, irrigation, and monitoring as listed at items (a) through (c) below. This measure would reduce the impact to a ***less-than-significant level***.

A *Tree Preservation and Management Plan* shall be prepared for the project. Preparation of this plan and subsequent planting and monitoring shall be a condition of project approval and shall be tied to a security bond posted by the developer. This plan shall include a planting detail that specifies where all replacement trees would be planted on the project site. The methods used to plant trees shall also be specified. Adequate measures shall be established to minimize predation of planted trees by rodents including, but not limited to, pocket gophers and/or California ground squirrels.

(a) Tree Replacement. To offset impacts resulting from the removal of coast live oaks, valley oaks, California bays, and big leaf maple trees that are greater than six inches in diameter at breast height, replacement oaks, bays, and maple trees shall be planted. To determine the number of trees removed, it shall be necessary for an arborist or biologist to be on the project site during tree removal to count the trees as they are removed. Mitigation numbers shall be based on a 3:1 replacement ratio typically required by CDFG for trees removed. In addition, any tree that is injured during grading or construction (e.g., some of its roots are cut, branches are pruned) shall be compensated for by planting replacement trees at a 1:1 ratio. Replacement trees shall be the same species as the ones removed, and will be no larger than five gallon size since large trees exhibit poor survivorship. The trees' health shall be monitored annually for five years by a qualified biologist or arborist. Annual monitoring reports shall be submitted to the City of Hayward and CDFG.

(b) Irrigation System. All planted trees shall be provided with a temporary irrigation system that would be maintained over a minimum three-year establishment period. At the end of a suitable establishment period, the irrigation system shall be removed. The irrigation system shall be placed on electric timers so that trees are automatically watered during the dry months of the establishment period.

(c) Monitoring. At the end of a five-year monitoring period, at least 50 percent of planted trees shall be in good health. If the numbers of planted trees falls below an 50 percent survival rate, additional trees shall be planted to bring the total number of planted trees up to 100 percent of the original number of trees planted. Irrigation and follow-up monitoring shall be established over an additional three-year period after any replanting occurs. Any follow-up monitoring shall be reported annually to the City of Hayward and CDFG.

Impact VW-2: Project Impacts on Special-Status Plants. Project development has the potential to impact special-status plants that may be found in approximately six acres of coast live oak forest, 27 acres of coastal sage scrub, and 381.0 acres of non-native annual grassland that would be affected by the project. This represents a **potentially significant impact** (see category (3) under "a. Significance Criteria" above).

Approximately 270 acres of coast live oak forest, 12.4 acres of Central Coast live oak riparian forest, 231 acres of coastal sage scrub, and 1,120 acres of non-native annual grassland habitat are present on the proposed project site. These plant communities provide suitable habitats for special-status plant species (i.e., Federal or State listed rare, threatened, endangered species, candidate species, or CNPS List 1B and 2 species). CDFG is concerned about the project's potential impacts to special-status species (and/or their habitats) that may occur in the vicinity.¹ The project site plan, golf course design and associated grading provisions would disturb approximately 27 acres of coastal sage scrub due to grading necessary to construct building pads and portions of the golf course. Approximately 381 acres of non-native annual grassland habitat would be affected due to grading necessary to construct portions of the golf course and building pads. Approximately six acres of coast live oak forest would be affected due to the grading necessary to construct golf course holes 3 and 4 at the northeast edge of the project and holes 5 and 6 at the southeast edge of the project. There would be no impacts to Central Coast live oak riparian forest, since this plant community is located in a portion of the project site proposed to be dedicated as open space.

In August 1995, ESA conducted a survey for the one special-status plant species mentioned in the 1991 EIR, Santa Cruz tarplant. ESA's survey covered portions of the Hayward 1900 property originally slated for development (ESA's survey area did not include the Roman Catholic Bishop property or the EBRPD property since it was not included in the project area at that time). In July 1997, RMI botanists conducted a survey for Santa Cruz tarplant on portions of the project site not previously covered by ESA: the Roman Catholic Bishop property, the EBRPD property, and the lower lying portions of the Hayward 1900 property. These two surveys for Santa Cruz tarplant are the only special-status plant surveys that have been conducted on the project site to date. In accordance with CDFG's "Rare Plant Survey Guidelines,"² one survey on a portion of the project site in August 1995 and one survey on another portion of the project site in July 1997 would not be sufficient to dismiss the presence of special-status plants on a project site. According to CDFG's guidelines, special-status plant surveys must be conducted at a time of year when the species in question are both evident and identifiable (i.e., flowering). CDFG further states that the surveys must be floristic in

¹CDFG (California Department of Fish and Game). 1997. Notice of Proposed Project, Blue Rock Country Club. Letter to Mr. H. Horn of the City of Hayward. April 8, 1997. 2 pps.

²CDFG (California Department of Fish and Game). 1984. Guidelines for assessing the effects of proposed developments on rare and endangered plants and plant communities. May 4, 1984. 2 pps.

nature, with every plant observed identified to the level necessary to determine its rarity status. CDFG has also expanded on these guidelines, requiring general surveys to be conducted throughout the growing season with focused surveys to be conducted during the flowering periods of possible rare plants on the site. Therefore, until surveys for special-status plants are completed that follow these guidelines, and the potential presence of the species listed in Table 3 in Appendix C is resolved, impacts to special-status plants are considered potentially significant.

Mitigation VW-2: Require springtime surveys for special-status plants, and either avoid or transplant/collect seed of any identified special-status plants to protected open space habitat. This would reduce the impact to a *less-than-significant level*.

Springtime surveys for special-status plants within the proposed development area shall be conducted by a qualified botanist. The surveys shall start in March and continue with a minimum of one survey a month through July. Any special-status plants identified during these surveys shall be mapped and sufficiently marked (staked) in the field. A California Native Species form shall be completed for any special-status plant found, and the sighting shall be reported to CDFG's Region 3 office in Yountville and USFWS' Endangered Species Office in Sacramento (if the plant has Federal status).

Any special-status plant identified on the project site shall be avoided, if practicable, and the population shall be fenced prior to construction. If avoidance is not possible, the plant shall be preserved by either one of two methods. If the plant is a perennial (has a bulb, rhizome, or corm), it shall be transplanted to a suitable location on the project site that will not be disturbed by the proposed project or at an offsite preserve. If the plant is an annual or biennial, seeds will be collected and adequately stored until they can be sown at a suitable location. If the special-status plant is a State or Federal listed species, it would be necessary to obtain a permit (an "incidental take" permit) from CDFG and/or USFWS prior to transplanting or collecting seed. Acquisition of an offsite preserve would also likely be required by CDFG and/or USFWS for impacts to State and/or Federal listed species.

In order to avoid any special-status plants identified within oak forest habitat, it would be necessary to redesign the golf course and/or golf course grading plan to eliminate disturbance of oak forest areas that currently overlap cut-and-fill locations for golf course holes 3 and 4 at the northeast edge of the project (south of neighborhood A) and hole 5 at the southwest edge of the project (west of neighborhoods D and F).

Impacts on Common Wildlife Species. Removal of grassland habitat, brush, and trees would reduce the value of the project site to wildlife by removing foraging, nesting, and roosting habitat. Grading, construction, and high human activity/use associated with the golf course and homes would cause wildlife species to disperse and leave the project site. This would force wildlife to search for new foraging, roosting, and nesting habitat, and would

increase competition for these habitats. Human activity would also likely disturb more secretive animals, causing them to leave the area, with their presence being replaced by more common wildlife species typical of urban environments. Animals that cannot easily leave the project site (e.g., amphibians, reptiles, and most small or burrowing mammals) would be most at risk. These species risk mortality due to project construction and impacts from vehicles. Additionally, domestic pets (cats and dogs) brought to the area by homeowners would result in increased mortality of the wildlife of Walpert Ridge. However, since that project would not affect populations or distribution of these common species, this impact would be considered ***less-than-significant impacts*** pursuant to the CEQA Guidelines.

Mitigation for Impacts on Common Wildlife Species. No significant impacts have been identified; no mitigation is required. Based on comments provided by the East Bay Regional Park District,¹ however, the City may wish to consider the following recommendations to offset general impacts to these animals.

- A buffer zone should be established between woodlands and development to allow wildlife to move unobtrusively through wooded areas.
- Due to the property's adjacency to open space (EBRPD land) and wildlife habitats, and the impacts to native wildlife from domestic cats and dogs (and feral cats and dogs), the homeowner's association should enact and enforce a leash law. It should also be a requirement of all homeowners to keep domestic cats indoors. These should be conditions written into the deeds of title for all homes and other private property owners within the development, and enforceable by the homeowner's association. By prohibiting free-roaming domestic animals to reside on Walpert Ridge, there will be less impacts to native fauna such as birds, deer, and small mammals, and less chance of a feral cat problem.
- Due to the project site's proximity to natural water ways, pesticides and herbicides used on the golf course and in landscaping associated with homes shall be those approved by the Environmental Protection Agency (EPA) for aquatic use (e.g., Rodeo).
- Fertilizers shall be allowed to be used on the golf course only during the dry season to avoid runoff of fertilizers into natural waterways. Portions of the golf course adjacent to open space areas shall be graded so that all runoff is directed away from natural habitats and waterways.
- Runoff from impervious surfaces such as patios and driveways should be directed away from natural areas and waterways that could be negatively affected by over watering and toxic substances (i.e., fertilizers, pesticides) in the water.

¹Letter from Brad Olson, EBRPD, to Dyana Anderly, City of Hayward, June 27, 1997.

Impact VW-3: California Red-Legged Frog. The project would directly affect red-legged frog habitat through project construction, and indirectly through changes in existing onsite hydrology, increase in non-native predators, and changes in water and soil chemistry due to introduction of herbicides, pesticides, and fertilizers. These effects would represent a **significant impact** (see category (3) under "a. Significance Criteria" above).

The California red-legged frog is a Federal listed threatened species and a State "species of special concern." This frog species is protected under the Federal Endangered Species Act and falls within the definition of rare pursuant to the CEQA Guidelines (14 CCR §15380). The California red-legged frog has been identified in seven of 16 ponds present on the project site. This frog has not been identified in the drainages on the project site. However, since California red-legged frogs are known to make seasonal movements within and between aquatic habitats, and the drainages on the project site either flow into or out of the ponds, "all ponds and drainages on the project site should be considered potential habitat for this species, and likely will be considered such by the resource agencies."¹ The project would result in direct and indirect impacts to this frog species. Impacts include direct take of California red-legged frogs during construction activities, loss of natural habitat due to filling of ponds and drainages for building pad construction and golf course construction, changes in natural hydrology of Walpert Ridge due to development, increase in non-native predators, and introduction of herbicides, pesticides, and fertilizers into the water, which would change the water and soil chemistry. Any project related impacts to this species or its habitat would be a significant adverse impact.

Mitigation VW-3: Require (1) avoidance of all ponds and drainages (including areas immediately upslope) on the project site, or (2) replacement of affected habitat in accordance with USFWS requirements. In addition, require measures to reduce construction related impacts and downstream impacts on this species. Finally, all resource agency approvals must be granted prior to earth moving activity. These measures would reduce the impacts to a **less-than-significant level**.

Ponds and drainages on the project site should be avoided to the greatest extent practicable so that California red-legged frogs are not affected by the project. In addition to avoiding the ponds and drainages, land upslope of ponds should be avoided to the extent practicable so that the watershed for the ponds is not affected.

¹RMI (Resource Management International, Inc.). 1996. Updated Status Report on Tiger Salamander and Red-Legged Frog Surveys, Walpert Ridge/Hayward 1900 Property. August 12, 1996. 4 pps.

If avoidance is not possible, and some of the ponds and drainages must be affected by the project, then it will be necessary for the U.S. Army Corps of Engineers (Corps) to initiate Section 7 consultation with the USFWS prior to the Corps authorizing impacts to "waters of the United States." During the Section 7 consultation, mitigation for impacts to California red-legged frog and its habitat would be developed with USFWS. USFWS is currently requiring 3:1 mitigation for impacts to California red-legged frog or its habitat (i.e., for every acre, or fraction thereof, of suitable California red-legged frog habitat that will be affected, three acres would have to be created onsite or at an offsite location).

The applicant estimates that approximately 0.86-acre of red-legged frog pond and stream habitat will be impacted by the project as proposed.¹ USFWS has not confirmed this acreage figure. This acreage will have to be verified by USFWS and a subsequent mitigation acreage prescription would need to be determined during consultation with USFWS personnel. Prior to any earth-moving activity on the project site, the applicant shall submit to the City of Hayward copies of all Federal approvals authorizing "incidental take" of California red-legged frog.

The applicant is proposing to set aside approximately 1,000 acres of the project site as mitigation for impacts to Federal and State listed species and wetlands. On this 1,000 acres, the applicant is proposing to create an estimated 10 to 14 ponds, totaling approximately eight to nine acres, as mitigation for impacts to California red-legged frogs and wetlands. The applicant is also proposing to restore approximately 13,360 linear feet of stream channel. In accordance with USFWS policy, any preserve established for the California red-legged frog would have to be established through Fee Title acquisition, or by acquisition of, or establishment of, conservation easements over lands that can be managed for this species (hereinafter Habitat Management Lands). Title to any Habitat Management Lands acquired to mitigate impacts to California red-legged frog (either by Fee Title or Conservation Easement) would have to be encumbered by a perpetual deed restriction that specifies the land would be managed for California red-legged frog values. This encumbrance would be in perpetuity and would run with the land to all future successors in title. Any Habitat Management Lands would have to be donated to a suitable conservation organization for management.

(a) *Specifications for Created Habitat.* California red-legged frog habitat created on or off the project site would need to be approved by the USFWS, but at a minimum should include the following mitigations (these mitigations are consistent with USFWS' policy for impacts to California red-legged frog):

- Created pools shall be excavated deep enough to provide the frogs with deep water habitat suitable for breeding, egg laying, and escape from predators. It is recommended that a significant portion of each pool be graded to pond water deeper than four feet. This will assure that emergent species such as cattail and bulrush do not fill in the created pool environments.

¹RMI. 1997. Blue Rock Country Club 1.6 Mile Grading and Lot Plan - Biological Resources. May 22, 1997. 13 pps.

- All created pools shall have shallow water areas that will provide a warm water environment necessary for larval development. To create shallow water areas, a 10-foot wide bench shall be constructed at varying elevations along the inside perimeter of each pool. The bench shall be constructed between a depth of one and three feet, so that no matter where the water level rises to on a given year, the frogs will have a shallow water environment along the perimeter of each pool. Creation of a perimeter bench will also restrict cattail and bulrush growth to the outside edge of the pool, providing cover for the frogs, yet not encroaching upon open water habitat.
- All created pools shall be equipped with a valve so that annual drainage of the pools is possible for predator control.
- A predator control plan shall be prepared and implemented. This plan shall sufficiently discuss how to eradicate bullfrogs and non-native fish, should they become established in created habitats.
- No mosquito fish or insecticides shall be used in the ponds; all mosquitoes must be controlled by mosquito growth regulators that are proven to be safe for use around amphibians (e.g., Methopreen).
- An integrated pest management plan shall also be prepared for the project.
- All created red-legged frog habitat shall be monitored by a qualified biologist at least once a year for a minimum of five years. Annual monitoring reports shall be prepared and submitted to the USFWS, CDFG, and the City of Hayward. If at any time during the five year monitoring period it is apparent that the created habitat is not functioning properly, remedial action shall take place. A security bond shall be posted by the developer to ensure that funds are available for remedial activities.
- All created ponds and existing ponds to be preserved shall be monitored annually to determine if silt removal is necessary. If siltation of the ponds is apparent, it will be necessary to clean the ponds to remove the excess silt. The methods implemented for silt removal must be approved by USFWS.

(b) Mitigation of Construction Period Impacts. In addition to creating California red-legged frog habitat, the following measures shall be implemented to reduce construction-related impacts to existing red-legged frog populations on the project site:

- Prior to project construction in California red-legged frog habitats, a frog capture and removal program shall be implemented. Any California red-legged frogs captured shall be relocated to protected mitigation preserves or suitable habitat (either on- or off-site) that would not be affected by the project. The methods of the trapping and removal effort must be arranged with USFWS.
- A biologist with experience working with California red-legged frogs shall be present during all construction activities within California red-legged frog habitat. Any California red-legged frog found within the construction zone will be relocated to suitable protected habitat outside of the development envelope.

(c) Mitigation of Downstream Impacts. The following measures shall be implemented to reduce impacts on downstream red-legged frog populations:

- To the extent possible, and working with USFWS and CDFG, Golf course fairways shall not be located within the watershed of ponds or drainages to be preserved, since chemicals used in maintaining the fairways can wash into these waterways and adversely affect the frogs. Golf course fairways and greens shall be engineered and graded to drain away from all water ways.
- Infiltration basins shall be constructed on the perimeter of golf course fairways to catch all golf course and urban runoff. This runoff shall be directed into the sewer or into swales that would not affect California red-legged frog habitat.
- Only chemicals approved by the Environmental Protection Agency (EPA) for aquatic use shall be allowed for use on the golf course and surrounding landscape (e.g., Rodeo, Trimec, Turflon). Chemicals shall only be used during the dry season months.
- Any lakes created for water storage purposes shall be drained annually to control non-native predators such as bullfrogs and fish. If possible, water tanks shall also be used for water storage to reduce the number of lakes constructed on the project site and reduce the amount of non-native predator habitat created.

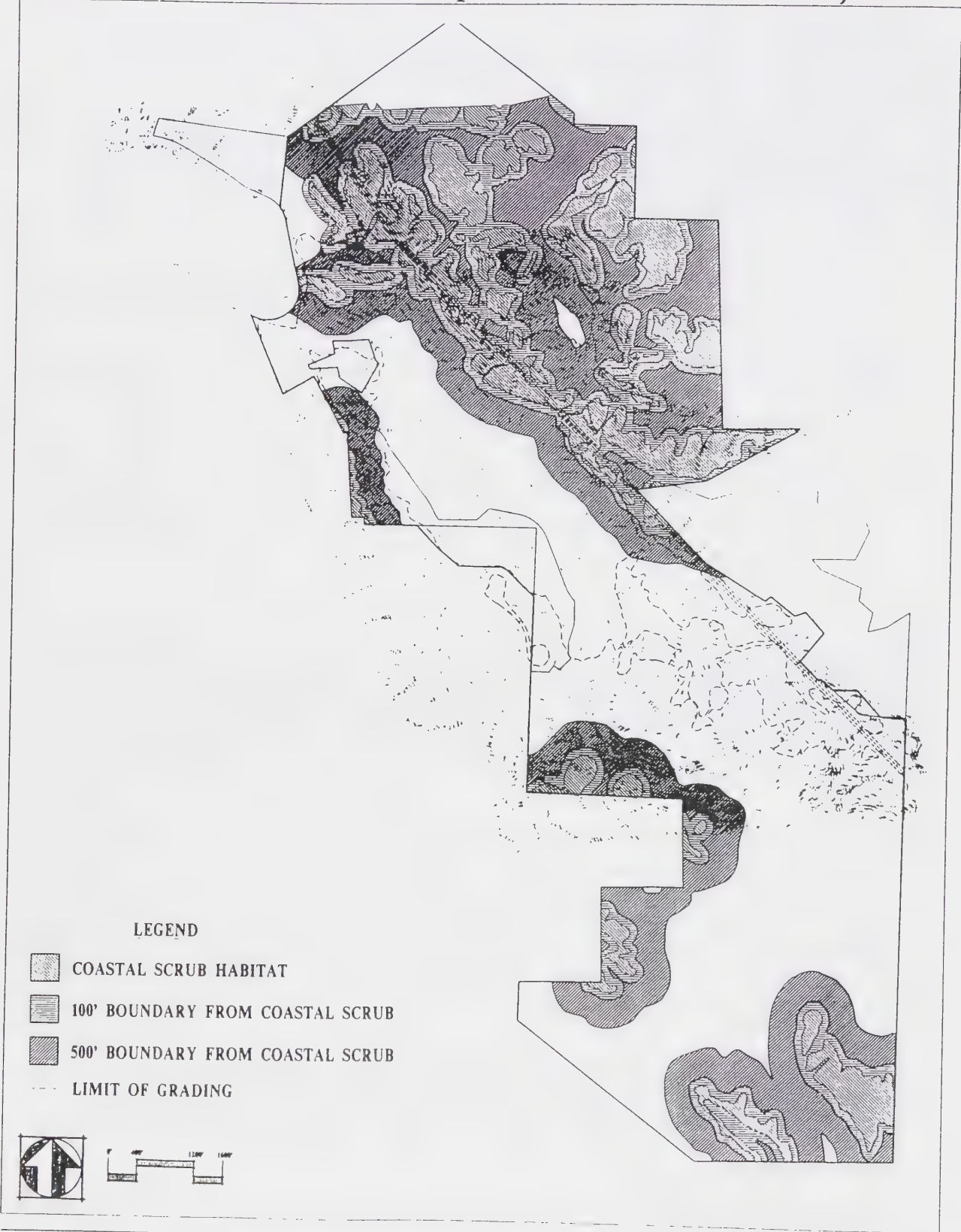
Impact VW-4: Project Impacts on Alameda Whipsnake. The project would destroy 120 acres of "core" habitat and 24 acres of foraging habitat for the Alameda whipsnake, representing a **significant impact** (see category (3) under "a. Significance Criteria" above).

The Alameda whipsnake is a State listed threatened species and is proposed for Federal listing as endangered. It has been identified in coastal scrub habitats on the project site. Potential impacts to this species include loss of nesting and foraging habitat due to shrub removal, and direct mortality from vehicles (i.e., construction equipment, cars). The Alameda whipsnake requires a "core habitat" consisting of coastal sage scrub with a 100-foot perimeter of grassland and/or oak woodland. A 400-foot "buffer zone" of foraging habitat should surround the core habitat (see Figure 23).

Approximately 120 acres of core whipsnake habitat would be affected by the project as proposed, and approximately 24 acres of the 400-foot buffer zone (i.e., foraging habitat) outside of the core area would be affected by the project as proposed.

Figure 23

Alameda Whipsnake Habitat on the Project Site



SOURCE: Hayward 1900

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

Mitigation VW-4: Prior to project construction, require the applicant to (1) obtain State and Federal agency approvals authorizing "incidental take" of Alameda Whipsnake habitat, and (2) prepare and implement an *Alameda Whipsnake Mitigation Plan*. These measures would reduce the impact to a *less-than-significant level*.

(a) "Incidental Take" Approvals. Prior to project construction, an incidental take permit (Section 2081 permit) would be required from CDFG. It is also recommended that the U.S. Army Corps of Engineers initiate a formal conference with USFWS (formal conferences are held for species proposed for Federal listing) for this snake species. As a matter of practice, because there would be a formal Section 7 consultation for California red-legged frog, the conference for Alameda whipsnake would be included with the consultation for California red-legged frog. Prior to any earth-moving activity on the project site, the applicant shall submit to the City of Hayward copies of all State and Federal approvals authorizing "incidental take" of Alameda whipsnake.

(b) Alameda Whipsnake Mitigation Plan. Development impacts to Alameda whipsnake, including grading and other activities that result in a substantial loss of native vegetation cover, in and within 100 feet of coastal scrub habitat (the core habitat area) require mitigation at a 5:1 ratio (i.e., for every acre, or fraction thereof, of whipsnake habitat that is impacted, five acres would need to be recreated or preserved at a suitable location where it could be protected in perpetuity). From 100 to 500 feet from coastal scrub habitat (400 foot buffer zone), 1:1 mitigation is required. Based on the acreage of proposed impacts to core habitat, including a 400-foot buffer zone (i.e., whipsnake foraging habitat), 624 acres of mitigation habitat shall be required. This acreage figure and any mitigation plan prepared for the project would have to be approved by CDFG and USFWS.

The applicant proposes to establish an Alameda whipsnake preserve in the southern portion of the project site (Section 32 on the USGS quad map). In addition, the applicant proposes to enhance the coastal scrub habitat within this preserve through a variety of measures such as restoration of coastal scrub habitats through a grazing management program and planting of coastal scrub vegetation. As stated above for the California red-legged frog, any preserve established for the Alameda whipsnake would have to be established through Fee Title acquisition, or by acquisition of, or establishment of, conservation easements over lands that can be managed for this species (hereinafter Habitat Management Lands). Title to any Habitat Management Lands acquired to mitigate impacts to Alameda whipsnake (either by Fee Title or Conservation Easement) would have to be encumbered by a perpetual deed restriction that specifies the land would be managed for Alameda whipsnake values. This encumbrance would be in perpetuity and would run with the land to all future successors in title. Any Habitat Management Lands would have to be donated to a suitable conservation organization for management.

At a minimum, the *Alameda Whipsnake Mitigation Plan* shall contain the following elements:

- If vegetation clearing and subsequent grading is scheduled to begin outside of the months of December through February, a herpetologist with experience with Alameda whipsnakes shall conduct a trapping and removal program prior to the removal of any coastal scrub habitat. Any whipsnakes trapped shall be moved to suitable habitat on the project site that would not be affected by development. Trapping shall not be conducted during the months of December through February.
 - A biological monitor with experience identifying and handling Alameda whipsnakes shall be present during all construction activities within coastal scrub habitats. Any whipsnake identified during scrub removal shall be captured if possible, and moved to suitable protected habitat on the project site.
 - Snake-proof fencing shall be in place during all construction activities adjacent to coastal scrub habitat so that snakes cannot move into the construction zone. The integrity of the fence shall be checked daily to ensure that snakes cannot get through the fence.
 - Permanent barriers shall be constructed between development in areas of suitable whipsnake habitat. Barriers shall be constructed of a solid material (e.g., rock, concrete), be a minimum of 30 inches high, and have an overhang of at least 10 inches on the habitat side of the fence to prevent snakes from crawling over. Barriers shall be buried to a depth of 12 inches.
 - Suitable buffers shall be established between development and suitable whipsnake habitat.
 - Rock outcrops shall be placed within the wildlife corridor to provide cover and foraging habitat for the whipsnake. Rock outcrops shall be placed on the south-facing slope of the drainages and shall be well drained.
 - Orchard trees shall not be planted on the golf course; rather, the areas where orchard trees are currently proposed shall be left as natural non-native annual grassland habitat for the whipsnake.
 - Rodent populations in the wildlife corridors and whipsnake habitat shall not be controlled. Rodent burrows provide retreats and potential nest sites for whipsnakes.
 - Grazing shall be minimized to the greatest extent practicable within the wildlife corridors (e.g., restricted to areas outside of drainageways).
-

Impact VW-5: Project Impacts on San Francisco Dusky-Footed Woodrat. The project has the potential to damage or destroy six acres of coast live oak forest that constitutes suitable San Francisco dusky-footed woodrat habitat, representing a **potentially significant impact** (see category (3) under "a. Significance Criteria" above).

San Francisco dusky-footed woodrat is a Federal "species of concern" and a State "species of special concern." Any project-related impacts to this species or its habitat would be considered a significant adverse impact. Potential impacts to this species include loss of nesting habitat due to shrub and/or tree removal and direct mortality from construction equipment. Approximately 11.4 acres of Central Coast live oak riparian forest and 289 acres of coast live oak forest occur on the project site; these communities provide suitable habitat for San Francisco dusky-footed woodrat. Approximately six acres of coast live oak forest would be affected by the project as currently proposed.

One woodrat nest was identified on the project site, outside the proposed development envelope, during Monk & Associates' April 23, 1997, half-day visit to the Hayward 1900 property. Hence, presence of dusky-footed woodrat on the project site has been determined. Additionally, since the subspecies *Annectens*, San Francisco dusky-footed woodrat, is known from Alameda County,¹ it is likely that the woodrat on the project site is the San Francisco dusky-footed woodrat. While it can thus be inferred that the San Francisco dusky-footed woodrat is present on the project site, it is not known at this time whether or not it occurs within the proposed development area.

Mitigation VW-5: Require surveys to be conducted in all oak habitats within the proposed development area prior to tentative subdivision map approval. If woodrats or their nests are found, either avoid their habitat or trap and relocate the woodrats to suitable habitat in the onsite dedicated open space area. Mitigation for any impacts would need to be arranged with CDFG. Preconstruction surveys would also be necessary if any woodrats are identified during earlier surveys. This measure would reduce the impact to a **less-than-significant level**.

In accordance with comments provided by CDFG on the NOP,² it shall be necessary for a biologist to survey all oak habitats within the proposed development area prior to tentative subdivision map approval, well in advance of grading or development, for evidence of nesting San Francisco dusky-footed woodrats (i.e., large stick nests). If any woodrat nests are

¹Hall, E.R. 1981. The Mammals of North America. Volume II. Second Edition. John Wiley & Sons, New York.

²CDFG. 1997. Response to the Notice of Preparation (NOP), Blue Rock Country Club Draft Environmental Impact Report (EIR), SCH #97072028, Alameda County. August 4, 1997.

identified, they should be avoided by the proposed development. If avoidance is not feasible, live traps shall be established at the nest sites to trap and remove woodrats from the proposed area of impact.¹ Woodrats trapped should be identified to subspecies, and relocated to suitable oak or riparian habitats in the dedicated open space area. Any trapped woodrats should be held until their nests can be relocated (reconstructed) at the release site. A rodent-proof fence should be constructed around reconstructed nests for a minimum of two weeks while the woodrats acclimate to their new surroundings. Ample food and water should be provided during the two week re-establishment period. For any San Francisco dusky-footed woodrat trapped, California Native Species forms should be completed. All mitigation arrangements shall be approved by CDFG. Finally, if any woodrats are identified during surveys, preconstruction surveys shall be conducted within 60 days prior to construction to ensure that no woodrats have moved into the area of impact.

Impact VW-6: Project Impacts on Greater Western Mastiff, Pacific Western Big Eared, and Myotis Bats. The project's elimination of approximately six acres of coast live oak forest, as well as abandoned buildings that may provide roosting habitat for these bats, represents a *potentially significant impact* (see category (3) under "a. Significance Criteria" above).

Greater western mastiff, Pacific western big eared bat, and several species of myotis bats are Federal "species of concern" and State "species of special concern," and would be protected pursuant to CEQA (14 CCR §15380). These bat species are known to roost in trees within open woodland and forest habitats similar to those found on the project site. The Pacific western big eared bat is also known to roost in old buildings.

Any project-related impacts to these bats or their habitats would be considered a significant adverse impact. Potential impacts to these species include reduction or loss of roosting habitat, and possibly death during removal of trees and abandoned buildings (sheds or old barns). Approximately six acres of coast live oak forest would be affected by the project as currently proposed. The project would not affect Central Coast live oak riparian forest on the project site. No surveys have been conducted for these bats on the proposed project site, and in the absence of survey results it must be concluded that impacts to these species are potentially significant.

¹Bean, C. 1997. Biologist with California Department of Fish and Game. Personal communication with S. Lynch of Monk & Associates. April 22, 1997.

Mitigation VW-6: Require surveys to be conducted in all oak habitats and buildings within the proposed development area prior to tentative subdivision map approval. If any special-status bat species are identified, their habitat shall be avoided. If avoidance is not feasible, bats shall be evicted from their roost sites. In addition, bat houses shall be constructed in open space areas outside the proposed development area. Preconstruction surveys shall also be required if special-status bats are identified during earlier surveys. These measures would reduce the impact to a ***less-than-significant level***.

In accordance with CDFG's comments on the NOP,¹ surveys for special-status bats shall be conducted within the proposed development area prior to tentative subdivision map approval, well in advance of any grading or development. Surveys shall be conducted by a biologist with experience surveying for and identifying bat species. If any special-status bats are identified during these surveys, their habitats should be avoided by the proposed development. If avoidance is not feasible, the bats shall be evicted from the trees or buildings in a manner that does not harm them. In addition, bat houses shall be constructed in open space areas outside the development envelope or at a suitable offsite preserve. The number of bat houses established shall be commensurate with the approximate number of bats that are evicted. California Native Species forms shall be completed and sent to CDFG's Natural Heritage Division in Sacramento for each special-status bat identified. Mitigation for impacts to special-status bats shall be approved by CDFG. In addition, if any special-status bats are identified during these surveys, additional surveys shall be conducted within 30 days prior to the removal of any tree or building (e.g., old barns or sheds) on the project site to determine if any special-status bat species have moved into these features. If special-status bats are found during the preconstruction surveys, the methods and mitigations described above shall be followed.

Impact VW-7: Project Impacts on Golden Eagle. The project would eliminate approximately six acres of coast live oak forest, which provides suitable nesting habitat for golden eagles. Project construction could also disturb an existing golden eagle nest in Garin Regional Park. These effects represent a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

The golden eagle is a State "species of special concern," and its eggs, nest, and young are protected under California Fish and Game Codes (§3503 and §3503.5). It is also protected under the Bald Eagle Protection Act (16 U.S.C. 668-668c), and the Migratory Bird Treaty Act

¹CDFG. 1997. Response to the Notice of Preparation (NOP), Blue Rock Country Club Draft Environmental Report (EIR), SCH #97072028, Alameda County. August 4, 1997.

(50 CFR 10.13). Any project-related impacts to this species or its habitat would be considered a significant adverse impact.

Potential impacts to this species from the proposed project include loss of nesting habitat, disturbance to nesting birds, and/or death of eggs and/or eaglets. The project would eliminate approximately six acres of coast live oak forest, which provides suitable nesting habitat for golden eagles. A golden eagle nest is known to exist in Garin Regional Park, approximately 2,100 feet southwest of the project's grading limit. No nesting golden eagles have been identified on the project site; however, due to the golden eagle nest existing in close proximity to the project site, it must be concluded that impacts to golden eagles from the proposed project would be potentially significant.

Mitigation VW-7: Require (1) spring nesting surveys for golden eagle prior to project construction and (2) construction-period mitigations to prevent disturbance of the Garin Regional Park nest and any identified onsite nests. This measure would reduce the impact to a *less-than-significant level*.

(a) Onsite Nesting Surveys. A preconstruction nesting survey for golden eagles shall be conducted by a qualified raptor biologist in the coast live oak and riparian forests. This survey should occur in the month of May. If project construction would occur earlier in the year, the survey could be completed as early as mid-March. If no golden eagle nests or other evidence suggesting there was a nesting attempt are found during this survey, no significant adverse impacts would be expected to occur to nesting golden eagles on the project site. If, however, an active golden eagle nest is identified during the survey, the construction-period mitigation described below shall be followed.

(b) Construction-Period Mitigations. If grading and/or construction activities are scheduled between the months of February and August within one-half mile (2,640 feet) of the Garin Regional Park nest site, or any golden eagle nest identified onsite during the preconstruction survey, it shall be necessary to have a qualified raptor biologist survey the area between the nest and the grading/construction zone to determine if any physical barriers (e.g., hills) could shield the nest site from grading and construction activity. Since the eagle nest at Garin Regional Park is greater than a quarter mile from the grading limit, if the raptor biologist determines that a hill or other physical barrier would shield the eagle nest from grading/construction disturbance, and CDFG agrees with the biologist's findings, grading shall be able to commence. If, however, the raptor biologist determines that there is an active nest and that there are no physical barriers between this nest site and grading, and the nest would be in the direct line of site/sound from grading, no construction/grading activity shall occur within one-half mile of the active nest site. The same rule applies for any nest identified on the project site. However, regardless of topography, construction should not occur any closer than 500 feet from an active nest site. Once it is determined by a qualified raptor biologist that the young have fledged the nest and attained sufficient flight skills to be able to avoid project construction zones (typically in September), construction within the one-half mile buffer zone

may resume. The portion of the one-half mile buffer zone on the project site shall be fenced with orange construction fence, and a raptor biologist shall be on the project site to make sure that no construction activities occur within the fenced buffer zone. The raptor biologist would also observe whether or not construction activities outside of the buffer zone are disturbing the eagles. If the biological monitor notices the adults or young exhibiting any signs of stress, all construction activity in the area shall cease until further mitigation is established by the biologist.

Impact VW-8: Project Impacts on Cooper's Hawk. The project would eliminate approximately six acres of coast live oak forest that may provide nesting habitat for the Cooper's hawk. This is a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

The Cooper's hawk is a State "species of special concern." It is also protected under the Migratory Bird Treaty Act (50 CFR 10.13), and its eggs, nest, and young are protected under California Fish and Game Codes (§3503, §3503.5, and §3800). CDFG is primarily concerned with protecting this species' nesting habitat, and any project-related impacts to this species or its habitat would be considered a significant adverse impact. Potential impacts to this species from the proposed project include loss of nesting habitat or disturbance to nesting birds that results in nest abandonment, loss of eggs and/or young. The coast live oak forest and Central Coast live oak riparian forest provide suitable nesting habitat for Cooper's hawks. Approximately six acres of coast live oak forest would be affected by the project as currently proposed. The project would not affect the onsite Central Coast live oak riparian forest. No nesting Cooper's hawks have been identified on the project site; however, due to the suitable habitat on the project site, it must be concluded that impacts to Cooper's hawk from the proposed project would be potentially significant.

Mitigation VW-8: Prior to project construction, require a spring survey for Cooper's hawk nests. If nest(s) are identified, require an adequate buffer zone around the nest(s) as determined by a raptor biologist and CDFG, and other mitigations during construction. These measures would reduce the impact to a ***less-than-significant level***.

A preconstruction nesting survey for Cooper's hawks shall be conducted by a qualified raptor biologist. The nesting survey shall be conducted in late-May or early-June. Since Cooper's hawks nest later in the year than golden eagles, these surveys should not be conducted concurrently with surveys for nesting golden eagles. If project site construction would occur earlier than late-May, the survey could be completed as early as April 1st.

If no Cooper's hawks nests or other evidence suggesting there was a nesting attempt are found in the coast live oak forest or in the riparian forest during this survey, no significant

adverse impacts would be expected to occur to Cooper's hawks from the proposed project. If nesting Cooper's hawks are found during the survey, the nest site must be protected until it is determined by a qualified raptor biologist that the young have fledged the nest and attained sufficient flight skills to be able to avoid project construction zones (typically in late-July or early August). To protect the nest site and nesting attempt, no construction or other disturbance shall be allowed any closer than one quarter mile (1,320 feet) from the nest or as determined by a qualified raptor biologist in consultation with CDFG. The raptor biologist shall make a determination as to a suitable buffer distance based on surrounding topography and whether or not there are hills or dense trees that may shield the nest from construction disturbance. Regardless of topography, at a minimum, construction should not occur any closer than 500 feet from an active nest site. The buffer zone shall be fenced with orange construction fencing. A biological monitor shall be present to make sure that construction remains outside the buffer zone, and to check that the birds do not exhibit any signs of stress from construction activities occurring outside the buffer. If it appears that construction activities may cause the adults to abandon the nest, construction activities must cease until the young reach independence. After the young reach independence, construction could resume in the nesting area.

Impact VW-9: Project Impacts on Sharp-Shinned Hawk. The project would eliminate approximately six acres of coast live oak forest that may provide nesting habitat for the sharp-shinned hawk. Project construction could also disturb an existing sharp-shinned hawk nest in Garin Regional Park, approximately 1,400 feet southwest of the project's grading limit. These effects represent a **potentially significant impact** (see category (3) under "a. Significance Criteria" above).

The sharp-shinned hawk is a State "species of special concern." It is also protected under the Migratory Bird Treaty Act (50 CFR 10.13), and its eggs, nest, and young are protected under California Fish and Game Code (§3503, §3503.5, and §3800). CDFG is primarily concerned with protecting this species' nesting habitat, and any project-related impacts to this species or its habitat would be considered a significant adverse impact.

Potential impacts to this species from the proposed project include loss of nesting habitat or disturbance to nesting birds that results in nest abandonment, loss of eggs and/or young. The coast live oak forest and Central Coast live oak riparian forest provide suitable nesting habitat for sharp-shinned hawks. Approximately six acres of coast live oak forest would be affected by the project as currently proposed. The project would not affect the onsite Central Coast live oak riparian forest. No nesting sharp-shinned hawks have been identified on the project site; however, because the project site provides suitable nesting habitat for this species, it must be concluded that impacts to sharp-shinned hawks from the proposed project are considered potentially significant.

Mitigation VW-9: Require (1) spring surveys for sharp-shinned hawk nests prior to project construction, and (2) construction period mitigations to prevent disturbance of the Garin Regional Park nest and any identified onsite nests. These measures would reduce the impact to a *less-than-significant level*.

(a) Onsite Nesting Surveys. A preconstruction nesting survey for sharp-shinned hawks shall be conducted by a qualified raptor biologist in the coast live oak and riparian forests. Nesting surveys for sharp-shinned hawks can be conducted concurrently with surveys for Cooper's hawks in late-May, early June, or as early as April 1st if construction would commence prior to May. If no sharp-shinned hawk nests or other evidence suggesting there was a nesting attempt are found during this survey, no significant adverse impacts would be expected to occur to nesting sharp-shinned hawks on the project site. If, however, an active sharp-shinned hawk nest is identified during the survey, the construction-period mitigation described below shall be followed.

(b) Construction-Period Mitigations. An active sharp-shinned hawk nest is in Garin Park, approximately 1,400 feet southwest of the project's grading limit. If grading and/or construction activities are scheduled between the months of February and August within 1,400 feet of this nest site (just over a quarter mile), no construction/grading activity shall occur within this 1,400-foot range until it has been determined by a qualified raptor biologist that the young have fledged and attained sufficient flight skills to be able to avoid project construction zones (typically by August). If a sharp-shinned hawk nest is identified on the project site, the raptor biologist shall make a determination as to a suitable buffer distance from the nest based on surrounding topography and whether or not there are hills or dense trees that may shield the nest from construction disturbance. CDFG shall be consulted prior to establishing a buffer distance. Regardless of topography, construction should not occur any closer than 500 feet from an active nest site. The portion of the buffer zone on the project site shall be fenced with orange construction fence, and a raptor biologist shall be on the project site to make sure that no construction activities occur within the fenced buffer zone. The raptor biologist will also observe whether or not construction activities outside of the buffer zone are disturbing the sharp-shinned hawks. If the biologist notices the adults or young exhibiting any signs of stress, all construction activity in the area shall cease. After the young reach independence, construction could resume in the nesting area.

Impact VW-10: Project Impacts on Northern Harrier. The project would eliminate approximately 381 acres of non-native grassland that may provide nesting habitat for the northern harrier. This would represent a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

The northern harrier is a State "species of special concern." It is also protected under the Migratory Bird Treaty Act (50 CFR 10.13), and its eggs, nest, and young are protected under California Fish and Game Code (§3503, §3503.5, and §3800). CDFG is primarily concerned with protecting this species' nesting habitat, and any project-related impacts to this species or its habitat would be considered a significant adverse impact.

Potential impacts to this species from the proposed project include loss of nesting habitat, disturbance to nesting birds, and death to nesting birds and/or its young. Non-native annual grassland on the project site provides suitable nesting habitat for northern harriers, and approximately 381 acres of non-native grassland habitat would be affected by the project as currently proposed. No nesting northern harriers have been identified on the project site; however, due to loss of suitable habitat, it must be concluded that impacts to northern harriers from the proposed project are considered potentially significant.

Mitigation VW-10: Prior to project construction, require a spring survey for northern harrier nests. If nest(s) are identified, require a one-quarter-mile buffer zone (or as determined by a qualified biologist in consultation with the Department of Fish and Game) around the nest(s) and other mitigations during construction. These measures would reduce the impact to a ***less-than-significant level***.

The year construction is proposed for the project site, a spring nesting survey for northern harriers shall be conducted by a qualified raptor biologist in grassland habitats that would be impacted by the project. This survey could be conducted concurrently with surveys for nesting golden eagles (in May). If no northern harrier nests or other evidence suggesting there was a nesting attempt are found in the grassland during this survey, no significant adverse impacts would be expected to occur to nesting northern harriers from the proposed project. If nesting northern harriers are found during the survey, the nest site must be protected until it is determined by a qualified raptor biologist that the young have fledged and attained sufficient flight skills to be able to avoid project construction zones. To protect the nest site and nesting attempt, no construction or other disturbance would be allowed any closer than one quarter mile from the nest, or as otherwise determined by a raptor biologist in consultation with CDFG. A biological monitor shall be present to make sure that construction remains outside the buffer zone, and to check that the birds do not exhibit any signs of stress from construction activities occurring outside the buffer. If it appears that construction activities may cause the adults to abandon the nest, construction activities must cease until the young fledge and are able to fly

well enough to avoid construction zones. After the young reach independence, typically in August, construction could resume in the nesting area.

Impact VW-11: Project Impacts on White-Tailed Kite. The project would eliminate approximately 381 acres of non-native grassland, as well as portions of adjacent coast live oak forest and coastal sage scrub, that may provide nesting habitat for the white tailed kite. This is a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

The white-tailed kite is "fully protected" under California Fish and Game Code (§3511). It is also protected under the Migratory Bird Treaty Act (50 CFR 10.13), and its eggs, nest, and young are protected under Fish and Game Codes (§3503 and §3503.5). Any project-related impacts to this species or its habitat would be considered a significant adverse impact. Potential impacts to this species from the proposed project include loss of nesting habitat, disturbance to nesting birds, and possibly death of adults and/or young. Non-native annual grassland, along with the edges of the coast live oak forest, Central Coast live oak riparian forest, and coastal sage scrub, adjacent to non-native annual grassland, provide suitable nesting habitat for white-tailed kites. Approximately 381 acres of non-native annual grassland would be affected by the project as currently proposed. In addition, portions of coast live oak forest and coastal sage scrub, adjacent to non-native annual grassland, would be affected. No nesting white-tailed kites have been identified on the proposed project site; however, due to loss of suitable nesting habitat, it must be concluded that impacts to white-tailed kites from the proposed project would be potentially significant.

Mitigation VW-11: Prior to project construction, require a spring survey for white-tailed kite nests. If nest(s) are identified, require a one-quarter-mile buffer zone (or as determined by a qualified biologist in consultation with the Department of Fish and Game) around the nest(s) and other mitigations during construction. These measures would reduce the impact to a ***less-than-significant level***.

The year construction is proposed for the project site, a spring nesting survey for white-tailed kites shall be conducted by a qualified raptor biologist. Nesting surveys for white-tailed kites can be conducted concurrently with surveys for golden eagle in May, or, if necessary, due to construction time frames, as early as late-February. If no white-tailed kite nests or other evidence suggesting there was a nesting attempt are found in the coast live oak forest, riparian forest, coastal scrub, or the non-native annual grassland communities during this survey, no significant adverse impacts would be expected to occur to white-tailed kites from the proposed project. If nesting white-tailed kites are found during the survey, the nest site must be protected until it is determined by a qualified raptor biologist that the young have fledged and attained sufficient flight skills to be able to avoid project construction zones. To

protect the nest site and nesting attempt, no construction or other disturbance would be allowed any closer than one quarter mile from the nest, or as otherwise determined by a qualified raptor biologist in consultation with CDFG. A biological monitor shall be present to make sure that construction remains outside the buffer zone, and to check that the birds do not exhibit any signs of stress from construction activities occurring outside the buffer. If it appears that construction activities may cause the adults to abandon the nest, construction activities must cease until the young reach independence. After young reach independence, construction could resume in the nesting area.

Impact VW-12: Project Impacts on Burrowing Owl. The project would eliminate approximately 381 acres of non-native annual grassland that may provide habitat for burrowing owls. This represents a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

The burrowing owl is a Federal "species of concern" and a State "species of special concern." The burrowing owl is also protected under the Migratory Bird Treaty Act and State Fish and Game Codes (§3503, §3503.5, and §3800). Any project related impacts to this species or its habitat would be considered a significant adverse impact. Potential impacts to this species from the project include loss of foraging and nesting habitat and possible death of nesting birds and young. Approximately 381 acres of non-native annual grassland would be affected by the project as currently proposed. Non-native annual grassland provides suitable habitat for burrowing owls (i.e., flat terrain, ground squirrel burrows). Although burrowing owls were not observed on the project site by RMI during their surveys for other special-status wildlife species, burrowing owls can be transitory and could move on to the project site prior to its development/use. Impacts on burrowing owls from implementation of the project are therefore considered potentially significant.

Mitigation VW-12: Require surveys for burrowing owls, installation of one-way eviction doors on burrows, if necessary, for any identified owls, and construction-period mitigations in accordance with CDFG and Burrowing Owl Consortium protocols. This measure would reduce the impact to a ***less-than-significant level***.

Surveys for burrowing owls shall be conducted in the non-native annual grassland habitat on the project site. Surveys shall be conducted as recommended in the CDFG *Staff Report on*

*Burrowing Owl Mitigation*¹ and as otherwise prescribed in the *Burrowing Owl Survey Protocol and Mitigation Guidelines*.² Survey methods include:

- If ground disturbance is to be initiated during the nesting season (February through August), surveys should be conducted between December 1 and January 31 to identify burrowing owl activities. If burrowing owl activity areas are found, passive relocation activities following Burrowing Owl Consortium standard guidelines (BOC 1993) should be implemented to discourage nesting in the immediate impact area. Repeat surveys should also be conducted not more than 30 days prior to initial ground disturbance to inspect for re-occupation and the need for additional protection measures.
- If December-January surveys are not conducted, pre-construction surveys should be conducted not more than 30 days prior to initial ground disturbance. If nesting activity is identified, then no construction should be allowed within a 250-foot radius of the occupied nesting burrow until it can be demonstrated that: (1) the nest has failed; (2) construction activities would not adversely affect the nest; (3) the young are foraging independently and capable of independent survival; or (4) the applicant obtains proper approvals from CDFG and USFWS for nest relocation or salvage.
- Passive relocation activities for any other identified burrowing owl activity (i.e., non-breeding season or individuals), should be implemented at least once per week prior to construction.
- If passive relocation is required, one artificial nest burrow or enhanced natural burrow, should be established in a designated location. The exact location of artificial burrow should be determined by a qualified biologist at the time of relocation based on current burrowing activity in the project site. Burrows should be located, however, to provide a minimum of 6.5 acres of foraging habitat per active burrowing owl territory.
- Artificial burrows, if required, should be patterned after Olenick (1987). Olenick (op. cit.) constructed artificial burrows consisting of a 12 in. x 12 in. x 8 in. wooden nesting chamber with a removable top and two, six-foot corrugated and perforated six-inch diameter plastic drain pipes for burrow tunnels. The nest chamber and tunnels are buried with approximately two feet of dirt to maintain the thermal integrity of the nest.
- All field surveys should follow survey protocols recommended by The Burrowing Owl Consortium and CDFG.

¹CDFG (California Department of Fish and Game). 1995. Staff Report on Burrowing Owl Mitigation. September 25, 1995. 8 pages and an attachment.

²BOC (The California Burrowing Owl Consortium). 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. April, 1993.

Impact VW-13: Project Impacts on Tricolored Blackbird. The project would eliminate shrubby willows and nine to 11 acres of wetland habitat that may provide nesting habitat for the tricolored blackbird. This represents a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

The tricolored blackbird is a Federal "species of concern" and a State "species of special concern." Any project-related impacts to this species or its habitat would be considered a significant adverse impact. Potential impacts to this species include loss of nesting habitat, and possible death to nesting birds and/or young. Shrubby willows and appropriate wetland habitats (i.e., cattails, thistles) on the project site provide suitable nesting habitat for this species. RMI did not observe any tricolored blackbirds on the project site while conducting surveys for other special-status species. In addition, RMI states that there is very little habitat for this species on the project site. However, it is possible that tricolored blackbirds could move onto the project site in the future. Hence, impacts to tricolored blackbirds from implementation of the project would be potentially significant.

Mitigation VW-13: Prior to project construction, require a spring survey for tricolored blackbird nests. If nest(s) are identified, require a 500-foot buffer zone around the nest(s) and other mitigations during construction. These measures would reduce the impact to a ***less-than-significant level***.

Although the amount of suitable tricolored blackbird habitat on the project site is minimal, a preconstruction nesting survey for tricolored blackbirds should be conducted in all suitable nesting habitats including cattails, shrubby willows, and large clumps of thistles. If any nesting tricolored blackbirds are identified on the project site during these surveys, a 500-foot buffer from the nesting colony should be established and construction within this buffer zone should not commence until it has been determined by a qualified ornithologist that the young have fledged (typically by June).

Impact VW-14: Project Impacts on Wildlife Corridors. The project has the potential to reduce the ability of wildlife to move from and through the project site to surrounding open spaces. This represents a ***potentially significant impact*** (see category (2) under "a. Significance Criteria" above).

The project site is situated on a ridge line surrounded by Garin Regional Park, Dry Creek Pioneer Regional Park, and other open space (i.e., privately owned property) (see Figure 3 in section III, Project Description). At present, the entire 1,635-acre project site provides wildlife habitat. Development of the project would reduce the amount of acreage that could be

utilized by extant populations of wildlife. In addition, development of the project could reduce the ability of wildlife to move between open spaces located on opposing sides of the project site, and to move from remaining habitats on the project site to those open spaces. Development of the project site, without preservation of large wildlife corridors that have minimum widths of several hundred feet, would be inconsistent with policies contained in the City of Hayward General Plan Conservation and Environmental Protection Element¹ (1977).

ESA and McGinnis identified two wildlife corridors on the project site. These wildlife corridors are located in Section 32 (Hayward and Dublin USGS topographic maps), on the southern portion of the project site. The applicant has proposed dedication of approximately 1,000 acres of onsite open space to the EBRPD or other public agency. Dedication of this open space area would assist in protecting these wildlife corridors. Implementation of the development plan without protection of wildlife corridors on the project site would be considered a significant adverse impact.

Mitigation VW-14: As proposed by the project, dedicate remaining onsite open space to the EBRPD or other public agency. This measure would reduce the impact to a *less-than-significant level*.

The applicant proposes to dedicate approximately 1,000 acres of the project site as open space. This open space includes two areas in Section 32 that have been identified as wildlife corridor habitats.² This land shall be dedicated by fee title transfer to the EBRPD, shall be preserved by a conservation easement dedicated to a qualified management agency, or shall be preserved as otherwise arranged pursuant to project related impacts to special-status species. Dedication of the open space to the EBRPD would provide some connectivity between EBRPD-owned lands located east and west of the project site.

Prior to accepting the open space dedication, the EBRPD would consider the open space area's conformance with the guidelines set forth in EBRPD's Guidelines for Open Space Planning and Management (1991). These guidelines address factors such as the size, configuration, and condition of the property; potential recreational or grazing opportunities; suitable wildlife corridors; notable cultural or natural resources; potable water supply; environmental hazards; vehicle and trail access; and police and fire service.³ This SEIR provides information regarding these issues.

¹City of Hayward. 1977b. Conservation and Environmental Protection Element. City Council Resolution 77-103. Revised September 12, 1978. City Council Resolution 78-311.

²ESA (Environmental Science Associates). 1991. Walpert Ridge Specific Area Plan: Environmental Impact Report. Draft. February 22, 1991; McGinnis, S.M. 1985. A Study to Determine the Presence or Absence of the Alameda Striped Race (*Masticophis lateralis euryxanthus*) on Walpert Ridge, Hayward, California. August 4, 1985. 12 pps.

³Olson.

Impact VW-15: Project Impacts on Waters of the U.S. and/or Stream Channels. The project would eliminate nine to 11 acres of "waters of the U.S.," including stream channels. This would represent a **significant impact** (see category (4) under "a. Significance Criteria" above).

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers regulates the disposal of dredged or fill material into "waters of the United States." Similarly, under Sections 1601-1603 of the California Fish and Game Code, CDFG regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream or its riparian vegetation.

Approximately 23.52 acres of "waters of the United States" including stream channels exist on the project site. The breakdown of this acreage is approximately 19.38 acres on the Hayward 1900 property, approximately 0.62-acre on the Roman Catholic Bishop property on the west side of the project site, and approximately 3.52 acres on the EBRPD property on the west side of the project site. This acreage figure has not yet been confirmed by the U.S. Army Corps of Engineers, and is subject to change based on the U.S. Army Corps of Engineers verification of RMI's maps. Approximately nine to 11 acres of "waters of the United States" including stream channels, would be affected by the project as currently proposed. Acreage impacts have not been finalized at this time. Impacts to "waters of the United States" and/or to stream channels on the project site are considered potentially significant and adverse.

Mitigation VW-15: Replace wetlands and stream channels in accordance with CDFG and U.S. Army Corps of Engineers requirements. This measure would reduce the impact to a **less-than-significant level**.

Both CDFG and the U.S. Army Corps of Engineers have "no net loss" policies that require, at a minimum, a 1:1 mitigation replacement ratio for impacts to stream channels and wetlands. Since the project would eliminate nine to 11 acres of stream channels and wetlands, the applicant shall be required, at a minimum, to replace an equivalent amount of stream channel and/or wetland habitat. Mitigation requirements for these impacts shall be pursuant to conditions imposed by the Corps and CDFG for authorizations/verifications/agreements that permit/authorize these impacts. Mitigation for impacts to stream channels and wetlands (which include ponds), shall incorporate mitigation elements developed with USFWS for project-related impacts to California red-legged frog.

As mitigation for wetland and red-legged frog impacts, the applicant is proposing to create 10 to 14 ponds, equaling approximately eight to nine acres. The ponds will likely range in size from approximately 0.25-acre to 1.5 to two acres in size. The applicant is also proposing to

enhance and restore approximately 13,360 linear feet of stream channel.¹ These mitigation proposals would have to be finalized with the U.S. Army Corps of Engineers and CDFG. In addition, any mitigation for wetlands and stream channels shall include the mitigations listed below.

(a) Mitigation for Stream Channels. In order to offset impacts to stream channels (Corps jurisdictional "other waters") that would be affected by the project, it shall be necessary to restore/enhance existing stream channels that would not be affected by the project. Stream restoration/enhancement shall be arranged with Corps and CDFG personnel at the time authorizations/agreements are applied for with these agencies. Stream restoration/enhancement mitigation shall include:

- Replacement tree and shrub planting as specified in *Mitigation VW-2*.
- Creation of pool environments through installation of native rock barriers (check dams) that have vertical drops on the downstream edge that are a minimum of 30 inches high. After installation of check dams, pool environments would initially form upstream of the rock barriers. Over time, these pools would silt in. However, providing that large rock has been installed (greater than 24 inches in diameter), the vertical drop on the downstream side of the rock barrier should result in pools that do not silt in. Hydrologic scouring would maintain the integrity of these pools over the long term.
- The vertical drop below native rock barriers must be greater than 36 inches in order for water scouring to create pool environments.

(b) Mitigation for Wetlands/Pools. To mitigate for impacts to wetlands/ponds that would be affected by the project, wetland plant/animal populations shall be relocated from the pools that would be affected to recreated wetland/pond habitats. Topsoils shall be removed from ponds/wetlands that would be affected, and placed into the recreated wetlands/ponds. These topsoils would contain a seed bank of the impacted wetland plant species that would germinate with fall/winter hydration of the recreated pond/wetland habitats. Recreated wetland habitats shall:

- remain inundated or saturated for sufficient duration to support a prevalence of hydrophytic vegetation;
- exhibit plant and invertebrate species richness comparable to the impacted wetlands;
- (if created to mitigate impacts to CRLF) have the ability to remain inundated on a perennial basis (these wetlands would be drained one month of each year to control predator populations);
- be monitored annually by a qualified biologist to document hydrology, plant colonization, and use by wildlife over a minimum of a five-year period, or until mitigation is considered

¹RMI. 1997. Blue Rock Country Club Biological Resources Mitigation Plan Map. June 13, 1997. 4 pps. plus three sheets (Sheets 1 - 3).

successful. All mitigation and monitoring requirements shall be coordinated with the Corps, USFWS, and CDFG.

In addition:

- Monitoring reports shall be prepared annually and submitted to the Corps, CDFG, USFWS, and the City of Hayward (for oversight of the mitigation program).
- The mitigation site(s) shall be protected in perpetuity by a conservation easement, other easement, or by Fee Title transfer of the property to a suitable conservation organization.
- No impacts shall occur to Corps jurisdictional pools/wetlands until a Corps permit is obtained that authorizes impacts to these features pursuant to Section 404 of the Clean Water Act. Similarly, no impacts shall occur to Corps jurisdictional areas until the California Regional Water Quality Control Board has issued a certification of water quality, or waiver thereof, pursuant to Section 401 of the Clean Water Act.

Impact VW-16: Cumulative Impacts on Biotic Resources. The project would contribute to the cumulative loss of (1) coast live oak forest, coastal sage scrub, wetland, and non-native annual grassland habitats; (2) special-status plant and animal species, including the California red-legged frog and the Alameda whipsnake; and (3) common plant and animal species. These cumulative losses would represent a **significant cumulative impact** (see categories (1) through (4) under "a. Significance Criteria" above).

Implementation of the Blue Rock Country Club project would contribute to a cumulative loss of coast live oak forest, coastal sage scrub, and non-native annual grassland habitats on Walpert Ridge and elsewhere in Alameda County.

- Construction of the proposed project would result in cumulative impacts to common plant and animal species. In addition, construction of the project would contribute to a cumulative loss of habitat that is known to support two listed species: the California red-legged frog, a Federal threatened species and a California species of special concern, and the Alameda whipsnake, a State listed threatened species and proposed for Federal listing as endangered. Habitats on the project site may also be important for several other special-status species, including 16 species of plants, eight species of mammals, six species of raptors, and one passerine bird species (see above discussion).

Implementation of the project would also increase the number of people and domestic animals living in previously native habitats. This project, combined with other development projects on Walpert Ridge, in Alameda County, and regionwide, would result in a cumulative adverse impact to native wildlife. The addition of people and domestic pets results in native wildlife being killed by cars, and domestic pets killing native wildlife. Introduction of domestic pets

could displace native wildlife from their territories, disturbing their natural sleeping and eating patterns, and could produce a feral pet problem. However, speed regulations, leash laws, and indoor cat requirements could reduce these impacts to native wildlife. Development of the project would also reduce the home range of large mammals, requiring them to move to new open space areas.

Construction of the project would result in cumulative impacts to "waters of the United States" that are regulated by the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Game. On a regional basis, these impacts would add to other development related losses of "wetlands" and "other waters." Impacts to "waters of the United States" would also affect California red-legged frogs residing on the project site. In addition, by altering drainage patterns and water flow, the project and cumulative development would affect downstream aquatic life, including downstream California red-legged frog populations.

Mitigation VW-16: As proposed by the project, require the applicant to dedicate and/or preserve approximately 1,000 acres of onsite open space. In addition, require enhancement of natural habitats on the project site that are outside of the development footprint. These measures, combined with implementation of *Mitigations VW-1 through VW-15* above, would reduce the project's contribution to the cumulative biotic resource impact to a ***less-than-significant level***.

Enhancement of non-native annual grassland shall include (1) seeding and/or planting plugs of native California grass species in proposed open space areas and on graded slopes, and (2) minimizing the amount of golf course turf area to the greatest extent practicable. Encourage use of rotational grazing practices in open space areas established on the project site to control build-up of thatch (i.e., dead grasses), and to allow native wildflowers and grasses a chance to compete with more aggressive, non-native species.

Enhancement of oak forest and coastal sage scrub would include planting of native trees and shrubs typical of those plant communities. Enhancement of wetland habitats would include the mitigation measures described in *Mitigation VW-15*, above.

D. TRANSPORTATION

This section describes the existing transportation system serving the project site and the surrounding area, potential impacts of the project on the operation of that system, and mitigation measures to reduce or eliminate significant impacts. This section has been adapted from a study entitled Site Traffic Analysis, Walpert Ridge Development (August 8, 1997), prepared for the City of Hayward by Barton-Aschman Associates, Inc. and Parsons Transportation Group. This study, which addressed impacts from development of other areas of Walpert Ridge in addition to the proposed Blue Rock Country Club project, is hereafter referred to as the Site Traffic Analysis, is available for review at the City of Hayward Department of Public Works/Engineering and Transportation Division.

1. SETTING

a. Roadway Network

Figure 24 shows the location of the project site in relation to the local and regional roadway system.

(1) Regional Roadways. Regional access to the project site is provided by Mission Boulevard, Carlos Bee Boulevard, and Jackson Street (SR 92). Mission Boulevard (SR 238) is a four-lane arterial that runs in the north/south direction west of the project site. Carlos Bee Boulevard is a four-lane street that provides access to the site via Campus Drive to Hayward Boulevard. Jackson Street (SR 92) is a four- and six-lane facility located to the west of the site. Access to the site is provided via its intersections with Soto Road, "E" Street, and "D" Street.

(2) Local Roadways. The local roadway system includes Carlos Bee Boulevard (Orchard Avenue), Mission Boulevard, Soto Road, and Jackson Street. Access to I-880 from the project site is provided via Hayward Boulevard, Carlos Bee Boulevard, Orchard Avenue, Soto Road, and Jackson Street, which has a full interchange with I-880. I-580 eastbound can be accessed from Grove Way, via Fairview Avenue, Maud Street, Kelly Street, and Center Street. I-580/SR 238 westbound can be accessed either from Center Street/Castro Valley Boulevard (via Fairview Avenue, Maud Street, and Kelly Street) or from Foothill Boulevard (via Hayward Boulevard, Carlos Bee Boulevard, and Mission Boulevard).

Local access to the project site is provided by Hayward Boulevard and Fairview Avenue. Hayward Boulevard is a two-lane roadway that borders the site, and provides access from

Carlos Bee Boulevard. Fairview Avenue is a two-lane roadway that borders the site, and provides access from "D" Street and Maud Avenue.

b. Existing Transit Service

The project site is located approximately three miles from the Castro Valley BART station and the South Hayward BART station, and approximately six miles from the Hayward BART station. Access to the South Hayward BART station is provided by Hayward Boulevard, Carlos Bee Boulevard, Mission Boulevard, and Tennyson Road. Access to the Castro Valley BART station (which opened in 1997) will be provided by Fairview Avenue, Maud Street, Kelly Street, Center Street, Castro Valley Boulevard, Redwood Road, and Norbridge Avenue. Access to the Hayward BART station is provided by Hayward Boulevard, Carlos Bee Boulevard, Mission Boulevard, and "B" Street.

AC Transit provides local bus service near the site (on Skyline Drive and Hayward Boulevard) via Line 94, with connections to the Hayward BART station. The bus service is provided during commute hours only and has a headway of 30 minutes.

c. Existing Intersection Level of Service

Figure 25 shows the locations of 23 intersections evaluated in this SEIR, and Table 11 indicates existing level of service (LOS) at these intersections. *Level of Service* is a qualitative description of intersection operations, ranging from LOS A, or free-flow conditions, to LOS F, or jammed conditions.

Two analytical methods were used in this study, one for signalized intersections and one for unsignalized intersections. *For signalized intersections*, the methodology used to estimate the level of service is based on the *1994 Highway Capacity Manual*. This method determines level of service from the estimated delay for the critical movements at the intersection. *For unsignalized intersections*, the methodology used to estimate the level of service is based on the *1994 Highway Capacity Manual* method for unsignalized intersections. This method is applicable for both two-way stop-controlled (TWSC) intersections and all-way stop-controlled (AWSC) intersections. Two-way stop-controlled intersections have stop signs on the minor street approaches and no control on the major street approaches. The TWSC and AWSC intersection levels of service are determined from the average total delay per vehicle for the most congested movement at the intersection.

Tables 12 and 13 describe levels of service and the corresponding range of delays for signalized and unsignalized intersections. Based on the City's level of service standard, an acceptable operating level is defined as LOS D or better for both signalized and unsignalized intersections. In accordance with the *Growth Management Element* of the City's General Plan, however, LOS E may be acceptable during peak commute times under certain circumstances due to the costs of mitigation and when roadway improvements would attract more traffic.

Figure 24

Project Site Location and Traffic Study Area

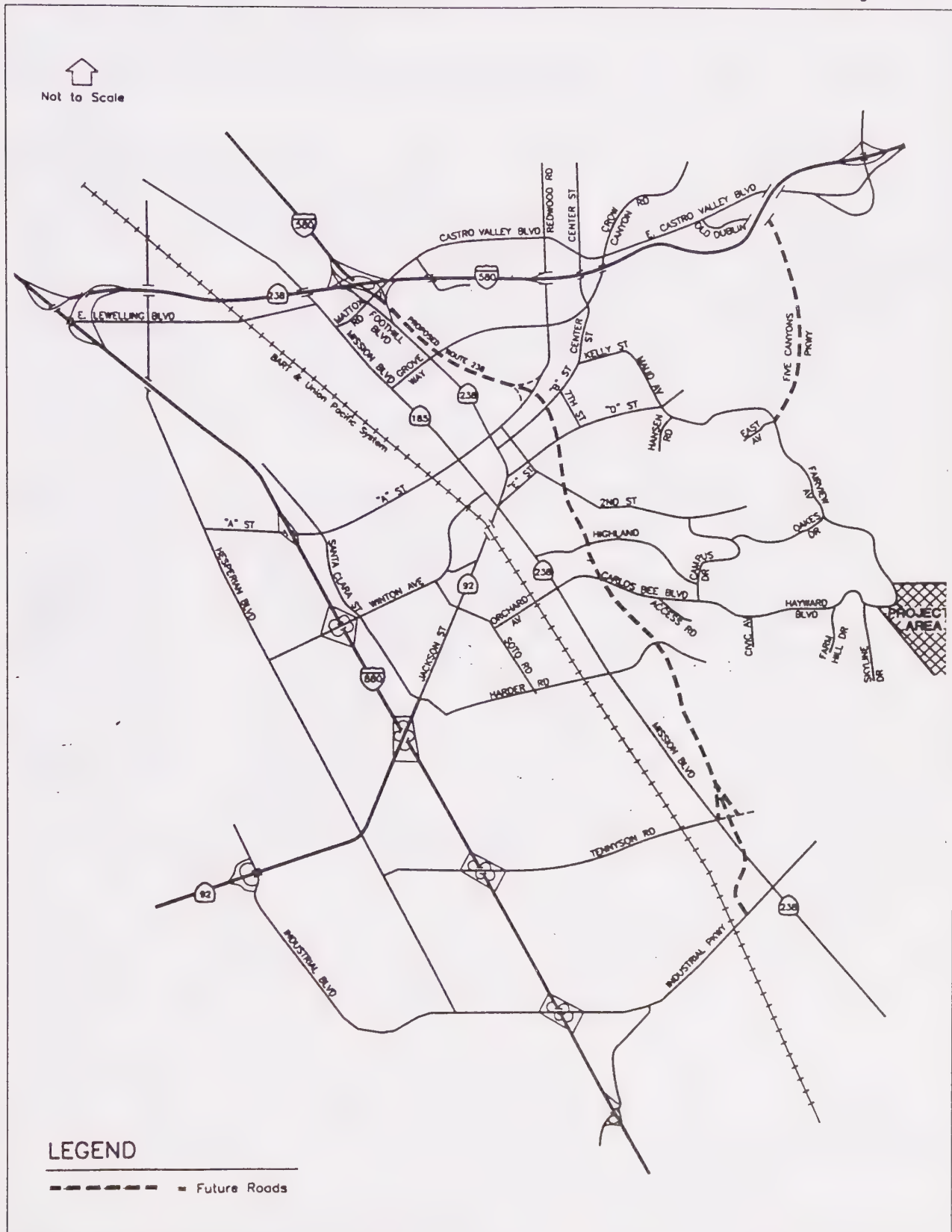
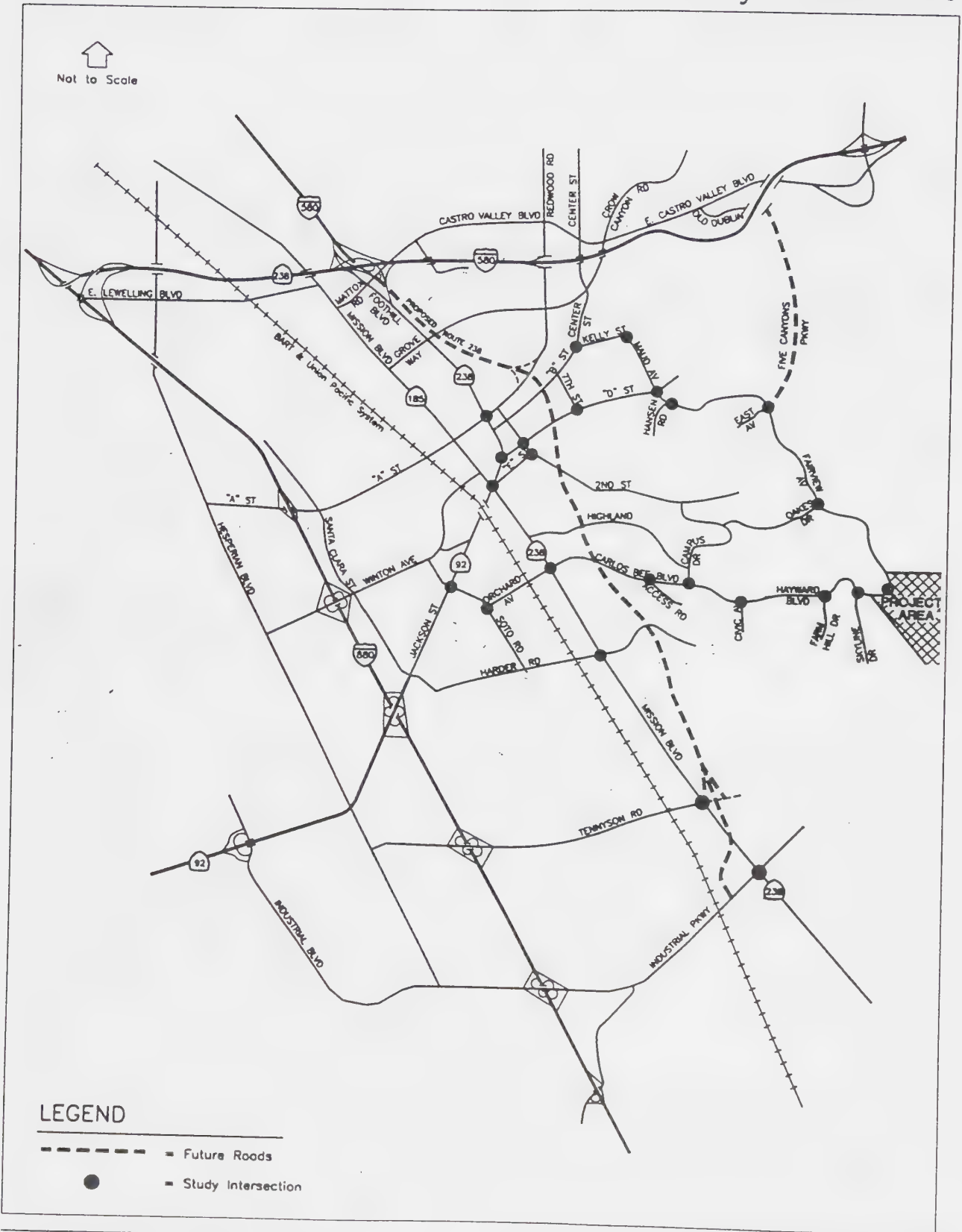


Figure 25

Study Intersections



SOURCE: Barton-Aschman Associates, Inc.

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

Table 11
INTERSECTION LEVELS OF SERVICE UNDER EXISTING CONDITIONS

Intersection		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
Unsignalized					
Maud Avenue	Kelly Street	49	F	24	C
Maud Avenue	"D" Street	11	C	18	C
Fairview Avenue	Hansen Road	6	B	7	B
Fairview Avenue	Five Canyons Parkway	5	A	4	A
Fairview Avenue	Oakes Drive	4	A	4	A
Fairview Avenue	Hayward Boulevard	n/a	--	n/a	--
Farm Hill Boulevard	Hayward Boulevard	6	B	5	A
Civic Avenue	Hayward Boulevard	103	F	17	C
Seventh Street	"D" Street	18	C	12	C
Skyline Drive	Hayward Boulevard	6	B	6	B
Signalized					
Campus Drive	Hayward Boulevard	18	C	11	B
CSUH Access Road	Carlos Bee Boulevard	13	B	19	C
Second Street	"E" Street	33	D	27	D
Second Street	"D" Street	11	B	13	B
Soto Road	Jackson Street	21	C	25	D
Soto Road	Orchard Avenue	32	D	31	D
Mission Boulevard	Carlos Bee Boulevard	36	D	37	D
Mission Boulevard	Harder Road	51	E	27	D
Mission Boulevard	Tennyson Road	10	B	12	B
Mission Boulevard	Industrial Parkway	24	C	32	D
Mission Boulevard	Jackson Street	92	F	347	F
Foothill Boulevard	"A" Street	84	F	297	F
Center Street	"B"/Kelly Street	68	F	125	F

SOURCE: Barton-Aschman Associates, Inc., 1997.

Table 12

SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS BASED ON DELAY

<u>Level of Service</u>	<u>Description</u>	<u>Average Stopped Delay Per Vehicle (Sec.)</u>
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Less than 5.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	5.1 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	15.1 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	25.1 to 40.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	40.1 to 60.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 60.0

SOURCE: Transportation Research Board, *Highway Capacity Manual, Special Report 209*, Third Edition (Washington, D.C., 1994), pp. 9-6--9.7.

Table 13

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>Level of Service</u>	<u>Average Stopped Delay per Vehicle (sec.)</u>
A	Less than 5.0
B	5.1 to 10.0
C	10.1 to 20.0
D	20.1 to 30.0
E	30.1 to 45.0
F	Greater than 45.0

SOURCES: Transportation Research Board, *Highway Capacity Manual, Special Report 209*, Third Edition (Washington, D.C., 1994), pp. 10-12 through 10-13, 10-37 through 10-42.

Level of service calculations were conducted for all intersections based on existing traffic volumes and lane configurations. Table 11 presents the results of this analysis. The results indicate that six of the 24 study intersections currently operate at an unacceptable LOS E or LOS F during at least one of the peak hours. The level of service calculations are included in Appendix B of the Site Traffic Analysis on file at the City of Hayward Department of Public Works/Engineering and Transportation Division.

2. IMPACT AND MITIGATION FINDINGS—1991 SPECIFIC AREA PLAN EIR

Table 14 summarizes transportation/circulation impacts and mitigation measures identified in the 1991 EIR.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. 2010 Conditions Without the Project

This subsection describes traffic conditions in the year 2010 without the project. Included are descriptions of the 2010 land uses, the 2010 roadway network, the three alternative roadway network scenarios, the 2010 transit service, the traffic model, the intersection level of service results, and the volume-to-capacity (V/C) analysis for the Congestion Management Program/Metropolitan Transportation System (CMP/MTS) roadway facilities.

(1) 2010 Land Use. The future land use assumptions for year 2010 in the City of Hayward were developed based on projections compiled by the Association of Bay Area Governments (ABAG) in 1994. The *Projections 94* series was chosen in order to be consistent with the methodology used by the Alameda County Congestion Management Agency (CMA).

The process of developing the land use projections for Hayward involved creating a more refined set of land use projections from the CMA data set to reflect the more refined geographical detail of land use within Hayward, San Leandro, and Castro Valley. Table 15 presents the number of households and jobs projected by the year 2010. As shown in the table, households and jobs in Hayward are expected to increase by 25 percent and 18 percent, respectively.

(2) 2010 Roadway Network. Several transportation improvements are planned that would be operational by 2010. The City of Hayward General Plan served as the basis for the 2010 network. These planned improvements include:

1. Upgrade of the I-880/SR 92 interchange to provide a High Occupancy Vehicle (HOV) lane for eastbound SR 92 to northbound I-880 and southbound I-880 to westbound SR 92; addition of a flyover from eastbound SR 92 to northbound I-880 and a direct connector from westbound SR 92 to southbound I-880.

Table 14

1991 EIR TRANSPORTATION/CIRCULATION IMPACT AND MITIGATION FINDINGS

Impact Summary

Intersection Effects Without New SR-238.

Traffic from development of 700 housing units, combined with cumulative development, would cause the Center/B/Kelly, Second/E, and Mission/Carlos Bee intersections to operate at Level of Service (LOS) E or F in the AM or PM peak hour; and the Campus/Carlos B Extension intersection to operate at LOS F in the AM peak hour. The East Campus Loop Road/ Carlos Bee intersection would satisfy signal warrants.

Traffic from development of 900 housing units, combined with cumulative development would be the same as described above, except that the Civic/Hayward intersection would also satisfy signal warrants.

Intersection Effects With New SR-238. With development of 700 housing units and assuming construction of the new SR-238, Second/E intersection operations would improve from LOS E to B in the AM peak hour, and LOS A in the PM peak hour. Mission/Carlos Bee intersection operations would improve from LOS F to D in the AM peak hour, and LOS E in the PM peak hour. Other conditions would be similar to the no-SR-238 scenario.

With development of 900 housing units, conditions would be similar to those described above. The Second/E intersection would operate at LOS B in the AM and PM peak hours. The Farm Hill/Hayward intersection would meet signal warrants.

Fairview Avenue Closure. Closure of Fairview Avenue at the City/Alameda County line would generate traffic increases equivalent to 700 units on Hayward Boulevard, and would divert Hill traffic to Second Street and similar intersections. With development of 700 housing units within 1.5 miles of Fire Station No. 5, Second/E intersection operations would

Mitigation Summary

Intersections. Improve operations at the Center/B/Kelly intersection to LOS D (with or without SR-238) through turning lane additions, Center Street bridge widening, and provision of additional through lanes on Center Street between Grove Way and the bridge.

Improve operations at the Mission/Carlos Bee intersection to LOS D (with or without SR-238) in the AM peak hour and LOS E (with or without SR-238) in the PM peak hour through various intersection improvements.

Improve operations at other intersections to LOS D or better through various intersection improvements.

Fairview Avenue. Improve residential driveway alignment, grades, and sight distance. Overall Fairview Avenue capacity would not require expansion.

be reduced from LOS E to F (AM and PM peak hours), and LOS at all other intersections would be reduced by one level. With development of 900 housing units within 1.5 miles of Fire Station No. 5, LOS at most intersections would be reduced by two levels, and delays would lengthen at LOS F intersections.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

Table 15

HOUSEHOLDS AND EMPLOYMENT IN HAYWARD AND ALAMEDA COUNTY

	<u>1996</u>		<u>2010</u>		<u>Growth 1996 to 2010</u>	
	<u>Households</u>	<u>Employment</u>	<u>Households</u>	<u>Employment</u>	<u>Households</u>	<u>Employment</u>
Hayward	44,466	78,656	55,605	93,168	25%	18%
Planning Area 2 ^a	117,004	146,028	134,861	165,357	15%	13%
Alameda County	501,953	648,599	576,704	811,971	15%	25%

SOURCE: City of Hayward Planning Department.

^a Planning Area 2 refers to the portion of Alameda County that includes Hayward, San Leandro, and Castro Valley.

2. Reconstruction of the I-880/Industrial Parkway interchange to provide a northbound diagonal off-ramp and an eastbound-to-northbound loop on-ramp.
3. Widening of SR 92 to three mixed-flow lanes in each direction plus an HOV lane in the westbound direction only, between I-880 and the San Mateo bridge toll-plaza; three mixed-flow lanes, in each direction, between the toll plaza and the high-rise portion of the bridge; and expansion of the toll plaza to 12 booths.
4. Widening of I-238 to add one additional mixed-flow lane in each direction between I-580 and I-880 and widening of northbound I-880 on-ramps to two lanes.
5. Upgrade of the existing Clawiter Road/SR 92 interchange complex with the addition of ramps to and from Whitesell Street, extension of Whitesell between Cabot Boulevard and Enterprise Avenue and between Breakwater Avenue and Arden Road, construction of an overcrossing for Whitesell Street, and extension of West A Street to provide a connection to Cabot Boulevard.
6. Construction of Five Canyons Parkway as a two-lane roadway that would provide access to the site from East Castro Valley Boulevard and I-580.
7. The widening of Mission Boulevard from four to six lanes between Industrial Parkway and Mowry Avenue.
8. The widening of Industrial Parkway from four to six lanes between Mission Boulevard and I-880.
9. The upgrade of "D" Street, between Grand Street and Second Street, from a two-lane collector to a four-lane arterial.
10. The extension of "D" Street as a four-lane arterial from Second Street to the future SR 238 Bypass.

While the transportation network used for this analysis was based on the Hayward General Plan, there are several important differences that make the resulting network consistent with regional and Congestion Management Agency assumptions. They are:

1. Mission Boulevard would be retained as a four-lane roadway (instead of six lanes) from Industrial Parkway to Mowry Avenue (same as existing).
2. Industrial Parkway would be retained as a four-lane roadway (instead of six lanes) from Mission Boulevard to I-880 (same as existing).
3. "D" Street would not be extended from Second Street to the future SR 238 Bypass.

Future improvements of a localized nature that were assumed in the analysis of 2010 conditions include widening of "D" Street west of Second Street and improvements to the intersection of Foothill Boulevard and "D" Street.

In addition to these improvements, three alternatives were analyzed with respect to the 238 Bypass project, as described below.

- *Network Scenario 1--With SR 238 Bypass.* Caltrans has planned the construction of a bypass of SR 238 between I-580 and Industrial Parkway. The existing SR 238 alignment follows Foothill Boulevard from I-580 to Mission Boulevard and Mission Boulevard south past Industrial Parkway and beyond the Union City/Hayward city limits. The bypass would be located east of the existing alignment and consist of a four-lane expressway with ramps at an "A" Street interchange, signals at intersections with Carlos Bee Boulevard and Harder Road, ramps at a Tennyson Road interchange, and terminating at an intersection with Industrial Parkway and Mission Boulevard. The bypass analyzed in this study does not include the westbound I-580 to southbound SR 238 connector ramp. This network scenario representation of the bypass corresponds to the fully completed (Stage 3) bypass and is shown on Figure 24. It does not include the westbound I-580 to southbound SR 238 Bypass direct connector ramp.
- *Network Scenario 2--With SR 238 Bypass Stage 1 Only.* The SR 238 bypass is to be completed in three stages. Network Scenario 2 corresponds to the completed Stage 1 of the bypass. Under this scenario, the bypass would be as described above but would extend only from I-580 to Harder Road. The bypass analyzed in this study does not include the westbound I-580 to southbound SR 238 connector ramp.
- *Network Scenario 3--Without SR 238 Bypass.* Network Scenario 3 includes the existing SR 238 alignment along Foothill and Mission Boulevards, but excludes the planned bypass.

This SEIR section presents the analysis for Network Scenario 2 only, because (1) Network Scenario 3 (Without SR 238 Bypass) is inconsistent with the General Plan requirement adopted by Measure L to pursue staged construction of the SR 238 Bypass, and (2) Stage 1 of the SR 238 Bypass has been fully funded while funding for the remaining stages remains uncertain, making Network Scenario 1 (full SR 238 Bypass) an unreasonable assumption for the year 2010.¹ Please refer to the Site Traffic Analysis for evaluation of Network Scenarios 1 and 3.

(3) 2010 Transit Service. Planned transit improvements primarily consist of increasing BART frequencies and adding service to Castro Valley and Pleasanton/Dublin. AC Transit local bus service would continue to operate with 30-minute headways and would make a scheduled stop at Fairview Avenue and Hayward Boulevard.

¹Robert Bauman, Deputy Director of Public Works, City of Hayward; personal communication, August 14, 1997.

(4) 2010 Traffic Model. The recently updated, validated model developed for the Hayward Circulation Element was used to produce the year 2010 traffic forecasts used in this study. The model is consistent with the Alameda County Congestion Management Agency (CMA) model. It is focused on the geographic area of Hayward, San Leandro, and Castro Valley and is referred to as the Planning Area 2 model. The model was updated with the revised year 2010 land use data and the revised year 2010 transportation networks, and was used to create the travel demand forecasts and ultimately the future intersection turning movements at intersections. Before the model forecast turn-movement volumes were used in the level of service calculations, the raw model output (forecast turn volumes) were adjusted based on the 1996 counts and the 1996 model validation. (Please refer to pages 11-12 of the Site Traffic Analysis.)

(5) 2010 Intersection Levels of Service Without the Project. Intersection level of service was used to evaluate traffic operations at the study intersections for each of the three network scenarios under 2010 conditions without the project. Volumes from the 2010 model forecasts and the adjustment process described above and future lane geometrics were used to determine intersection level of service. Table 16 summarizes the intersection level of service results for 2010 project conditions for Network Scenario 2. Please refer to the Site Traffic Analysis for evaluation of Network Scenarios 1 and 3.

Intersection levels of service were evaluated for year 2010 traffic conditions without the project under Network Scenario 2. The results indicate that 7 of the 24 study intersections would operate at an unacceptable LOS E or worse during at least one of the peak hours (see Table 16). The remaining study intersections would operate at an acceptable LOS D or better during both of the peak hours.

b. 2010 Conditions With the Project

This subsection describes traffic conditions in the year 2010 with the project. Included are descriptions of the project land uses, project trip generation, project trip distribution and assignment for Network Scenario 2, intersection level of service results for Network Scenario 2, and the volume-to-capacity (V/C) analysis for the Congestion Management Program/Metropolitan Transportation System (CMP/MTS) roadway facilities.

(1) Project Description. The development consists of a 2,416-acre site in the Walpert Ridge planning area. Walpert Ridge is located in the Hayward hills, with access to the Hayward roadway system via Fairview Avenue and Hayward Boulevard. The project consists of the total buildout of the separately owned parcels comprising the site with 805 single-family detached dwelling units, an 18-hole golf course with restaurant facilities, an elementary school with a 650-student capacity, a tennis club with swimming pool, and neighborhood park. This analysis assumes allocation of units to the properties covered under the Walpert Ridge Specific Plan as follows: 135 units to the Bailey property, 603 units to the Hayward 1900 property, 47 units to the Roman Catholic Church property, and 20 units to the Carden property. Development proposals for the Hayward 1900/Roman Catholic Church properties

Table 16
INTERSECTION LEVELS OF SERVICE UNDER 2010 CONDITIONS WITHOUT THE
PROJECT FOR NETWORK SCENARIO 2

Intersection		With SR 238 Bypass Stage 1 (Network Scenario 2)			
		AM Delay*	LOS	PM Delay*	LOS
Unsignalized					
Maud Avenue	Kelly Street	42	E	45	E
Maud Avenue	"D" Street	11	C	11	C
Fairview Avenue	Hansen Road	9	B	6	B
Fairview Avenue	Five Canyons Parkway	7	B	9	B
Fairview Avenue	Oakes Drive	5	A	5	A
Fairview Avenue	Hayward Boulevard	3	A	3	A
Farm Hill Boulevard	Hayward Boulevard	8	B	7	B
Civic Avenue	Hayward Boulevard	1,202	F	60	F
Seventh Street	"D" Street	63	F	231	F
Skyline Drive	Hayward Boulevard	4	A	4	A
Signalized					
Campus Drive	Hayward Boulevard	20	C	10	B
CSUH Access Road	Carlos Bee Boulevard	11	B	15	B
Second Street	"E" Street	142	F	49	E
Second Street	"D" Street	16	C	16	C
Foothill Boulevard	"D" Street	19	C	33	D
Soto Road	Jackson Street	29	D	21	C
Soto Road	Orchard Avenue	29	D	21	C
Mission Boulevard	Carlos Bee Boulevard	23	C	26	D
Mission Boulevard	Harder Road	96	F	123	F
Mission Boulevard	Tennyson Road	157	F	80	F
Mission Boulevard	Industrial Parkway	n/a	n/a	n/a	n/a
Mission Boulevard	Jackson Street	n/a	n/a	n/a	n/a
Foothill Boulevard	"A" Street	n/a	n/a	n/a	n/a
Center Street	"B"/Kelly Street	77	F	173	F

SOURCE: Barton-Aschman Associates, Inc., 1997.

Notes:

1. Intersection geometrics at Mission and Carlos Bee include improvements associated with the SR 238 Bypass.
2. The intersections of Mission/Industrial, Mission/Jackson-Foothill, and Foothill/"A" were analyzed only for the scenario without the SR 238 Project.
3. The intersection of Fairview Avenue and Five Canyons Parkway was analyzed as an unsignalized intersection.
4. Level of service and delay for unsignalized intersections is based on the worst case movement.
5. Delay greater than 500 seconds exceeds reasonably expected delay and is presented for comparison purposes only.

* "Delay" is measured in seconds.

(i.e., the Blue Rock Country Club project) and for the Bailey property have been submitted to the City and are currently pending. The development application for the Hayward 1900/ Catholic Church properties (i.e., the Blue Rock Country Club project) proposes a total of 650 units in a private, gated community with an 18-hole golf course and related amenities and a 350-student school. This traffic analysis assumes possible future construction by the Hayward Unified School District of additional capacity at the school.

For purposes of this analysis, all anticipated development on Walpert Ridge is referred to as the "project." This approach is consistent with the 1991 EIR, which addressed the cumulative effect of buildout on Walpert Ridge.

(2) Project Trip Generation. The Planning Area 2 model was used to create trip generation for the project and background land uses. Trip generation was estimated using trip generation rates obtained from the ITE *Trip Generation* manual, 5th Edition, 1991, or from information from previous experience and project characteristics for the individual land uses for which rates were not available in the manual. Trip distribution was based on the Planning Area 2 model. The mode choice estimated the trips that used the travel modes of two-person carpool, three-person carpool, drive-alone, and transit. Finally, the AM and PM peak-hour drive-alone and carpool vehicles were assigned to the transportation network facilities. The following are brief explanations of the trip generation for each of the individual project land uses. Table 17 summarizes trip generation for the project. (Please refer to pages 16-17 of the Site Traffic Analysis for details regarding trip generation estimates used for the project.)

(3) Project Trip Distribution and Assignment. Project trip distribution and assignment were established by the traffic model in accordance with the zonal trip tables. The distribution of project trips for Network Scenario 2 is shown on Figure 26. The project trip distribution percentages shown reflect the percentage of total net (i.e., external) project trips that were assigned to the road segment indicated. The percentages are shown only on the segments that (1) lead into and out of the site, or (2) lead into and out of the study area. The distribution percentages leading into and out of the site will necessarily add to 100 percent, since the number of external trips by definition equals the number of trips into and out of the site. The distribution percentages leading into and out of the study area would not, however, equal 100 percent unless every project trip were to leave the study area. For example, on Figure 26 the percentage of project trips escaping the study area is approximately 52 percent. It is deduced then that the remainder of the project trips, approximately 48 percent, would be confined to the study area.

There is a difference in trip distribution and assignment for the project trips between the 1991 program EIR and this analysis due to the methodology used. The 1991 EIR used a manual distribution/assignment methodology. The present study estimated background conditions and project impacts using the City's Planning Area 2 travel demand model, which was validated in

Table 17
PROJECT TRIP GENERATION

Land Use	Ind Variable	Units	AM Peak Hour						PM Peak Hour					
			Rate/	Total	Capture	Net	AM Trips		Rate/	Total	Capture	Net	PM Trips	
			Unit	Trips	Rate ³	Trips	In	Out	Unit	Trips	Rate ³	Trips	In	Out
Blue Rock Country Club:														
Residential: SF Detached	650	d.u.	0.74	481	5%	457	119	338	1.01	657	8%	604	393	211
Elementary School ⁴	650	students	0.28	182	21%	144	86	58	0.06	39	10%	35	14	21
Tennis and Swim Club	8	courts	1.40	11	82%	2	1	1	3.86	31	90%	3	2	1
Golf Course ¹	18	holes	2.72	49	41%	29	23	6	2.44	44	41%	26	5	21
Restaurant (High Quality)	6	ksf	0.92	6	50%	3	3	0	7.66	46	50%	23	16	7
Neighborhood Park	5	acres	0.22	1	100%	0	0	0	0.22	1	100%	0	0	0
Private Neighborhood Parks	5	acres	0.22	1	100%	0	0	0	0.22	1	100%	0	0	0
Open Space ²														
Other Walpert Ridge Development:														
Residential: SF Detached	155	d.u.	0.74	115	5%	109	28	81	1.01	157	8%	144	50	94
Total				846		744	260	484		976		835	480	355

SOURCE: Barton-Aschman Associates, Inc., 1997.

Notes:

- ¹ Golf course (18-hole) includes a clubhouse, maintenance area, and practice range
- ² Open Space consists of landscaped and open space reservations areas
- ³ Captured trips for the school were not deducted from trips generated by residential, because most trips to school are made on the way to work
- ⁴ The generated trips for a 350-student school would be 77 in the AM peak hour and 19 in the PM peak hour.

Figure 26



1996.¹ The model distributes and assigns traffic based on shortest travel time paths, whereas the manual method tends to distribute and assign traffic based on shortest distance paths.

Hayward Boulevard and Fairview Avenue provide the only direct access to the site. The total percentage of external project trips on these roads (at the site boundary) is 100 percent.

(4) 2010 Intersection Levels of Service With the Project. Year 2010 traffic conditions with the project were evaluated for Network Scenario 2. Traffic conditions were established from the traffic model forecasts of intersection turning movements and the planned future lane geometrics. The results are presented below.

Intersection levels of service were evaluated for year 2010 traffic conditions with the project under Network Scenario 2. Table 18 shows the intersection level of service results for this scenario. The results indicate that seven of the 24 study intersections would operate at an unacceptable LOS E or worse during at least one of the peak hours (see Table 18). The remaining study intersections would operate at an acceptable LOS D or better during both of the peak hours.

c. Significance Criteria

(1) Significance Criteria for Traffic Congestion. Based on Appendix G of the CEQA Guidelines,² a project transportation impact is considered to be *significant* in this EIR analysis if:

- the project-related transportation system changes will conflict with an adopted plan or goal of the city pertaining to transportation, including violation of an applicable, City-adopted level-of-service standard, or
- the impact involves an increase in traffic which is *substantial* in relation to the existing traffic load and capacity of the street system.

In this SEIR, the proposed project is considered to create a *significant impact* on traffic conditions if any of the following conditions occurs:

1. An intersection operating at LOS D or better without the project is made to operate at LOS E or worse with the project.

¹This model was developed for the Hayward Circulation Element, and was used to produce the year 2010 forecasts used in this traffic study. The model, which is consistent with the Alameda County Congestion Management Agency Model, focuses on the geographical area of Hayward, San Leandro, and Castro Valley.

²State Office of Planning and Research, CEQA Guidelines, Appendix G, items a and I; 1986.

Table 18

INTERSECTION LEVELS OF SERVICE UNDER 2010 CONDITIONS WITH AND WITHOUT THE PROJECT FOR NETWORK SCENARIO 2 (WITH SR 238 BYPASS STAGE 1 ONLY)

Intersection		Without Project				With Project			
		AM		PM		AM		PM	
		Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS
Unsignalized									
Maud Avenue	Kelly Street	42	E	45	E	42	E	45	E
Maud Avenue	"D" Street	11	C	11	C	11	C	12	C
Fairview Avenue	Hansen Road	9	B	6	B	10	B	6	B
Fairview Avenue	Five Canyons Parkway	7	B	9	B	8	B	17	C
Fairview Avenue	Oakes Drive	5	A	5	A	9	B	8	B
Fairview Avenue	Hayward Boulevard	3	A	3	A	12	C	16	C
Farm Hill Boulevard	Hayward Boulevard	8	B	7	B	23	D	18	C
Civic Avenue	Hayward Boulevard	1,202	F	60	F	3,541	F	1,118	F
Seventh Street	"D" Street	63	F	231	F	63	F	232	F
Skyline Drive	Hayward Boulevard	4	A	4	A	8	B	9	B
Signalized									
Campus Drive	Hayward Boulevard	20	C	10	B	28	D	10	B
CSUH Access Road	Carlos Bee Boulevard	11	B	15	B	10	B	15	B
Second Street	"E" Street	142	F	49	E	148	F	52	E
Second Street	"D" Street	16	C	16	C	17	C	16	C
Foothill Boulevard	"D" Street	19	C	33	D	19	C	33	D
Soto Road	Jackson Street	29	D	21	C	33	D	23	C
Soto Road	Orchard Avenue	23	C	26	D	27	D	33	D
Mission Boulevard	Carlos Bee Boulevard	96	F	123	F	109	F	145	F
Mission Boulevard	Harder Road	157	F	80	F	174	F	92	F
Mission Boulevard	Tennyson Road	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mission Boulevard	Industrial Parkway	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mission Boulevard	Jackson Street	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Foothill Boulevard	"A" Street	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Center Street	"B"/Kelly Street	77	F	173	F	78	F	173	F

SOURCE: Barton-Aschman Associates, Inc., 1997.

Notes:

1. Intersection geometrics at Mission and Carlos Bee include improvements associated with the SR 238 Bypass.
2. The intersections of Mission/Tennyson, Mission/Industrial, Mission/Jackson-Foothill, and Foothill/"A" were analyzed only for the scenario without the SR 238 Project.
3. The intersection of Fairview Avenue and Five Canyons Parkway was analyzed as an unsignalized intersection.
4. Level of service and delay for unsignalized intersections is based on the worst case movement.
5. All unsignalized intersections that are impacted by the project require signalization. Under the mitigation condition they are thus evaluated based on LOS method for signalized intersections.
6. As a project requirement, the intersection of Fairview Avenue and Hayward Boulevard will be signalized. The projected volumes, with the project, would meet Caltrans signal warrant for rural areas.
7. Delay greater than 500 seconds exceeds reasonably expected delay and is presented for comparison purposes only.
8. With the addition of project traffic, the Farm Hill Boulevard/Hayward Boulevard intersection would meet Caltrans signal warrant criteria.

* "Delay" is measured in seconds.

Bold face text indicates intersections where the Site Traffic Analysis identifies a potentially significant impact.

2. An intersection operating at LOS E without the project is made to operate at LOS F with the project.
3. An intersection operating at LOS E or worse without the project is subjected to an increase in delay of four or more seconds with the project.
4. An unsignalized intersection is caused to meet Caltrans signal warrant guidelines.

The project would be responsible for its fair share of mitigation measures to achieve LOS D or better operations. The project's percent contribution to the cost of these improvements is based on the percent increase in traffic at the mitigated intersection due to the project. Significant impacts thus mitigated are said to be mitigated to a less-than-significant level. In accordance with the *Growth Management Element* of the City's General Plan, LOS E may be acceptable during peak commute times under certain circumstances due to the costs of mitigation and when roadway improvements would attract more traffic.

This section presents recommended mitigation to achieve LOS D operations. Please refer to the Site Traffic Analysis for mitigations that would achieve LOS E operations at the affected intersections.

(2) Significance Criteria for Roadway Safety. Based on the CEQA Guidelines, a project or project-plus-cumulative related change to the roadway system is considered in this SEIR to have a *potentially significant adverse safety impact* if:

5. the associated changes to the transportation system result in conditions that conflict with adopted City of Hayward or Alameda County design standards with respect to sight distance, roadway width, spacing between intersections and driveways, and other safety-related requirements.

d. Impacts and Mitigation Measures

NOTE: These impact and mitigation findings are intended to replace the traffic impact and mitigation findings of the 1991 EIR. Please refer to Table 21 at the end of this section for a comparison of the traffic improvements recommended by this SEIR and the 1991 EIR.

This subsection describes project impacts and measures recommended to mitigate those impacts. Intersection impacts are classified in two categories: project impacts and cumulative impacts. Table 19 summarizes the impact and mitigation findings for affected intersections.

This subsection presents impact and mitigation findings based on the assumption that only Stage 1 of the SR 238 Bypass (extending from I-580 to Harder Road) (i.e., Network Scenario 2) would be constructed by the year 2010. Please refer to the Site Traffic Analysis for evaluation of impacts and required mitigations assuming construction of the full SR-238

Table 19

RECOMMENDED MITIGATION MEASURES FOR POTENTIALLY SIGNIFICANT INTERSECTION IMPACTS

Intersection	Mitigation Number	Description of Mitigation	Mitigated LOS				% Project* Contribution to Mitigation
			AM		PM		
			Delay	LOS	Delay	LOS	
Project* Impacts:							
Farm Hill Drive/Hayward Boulevard	T-1	Installation of signal.					100
Cumulative Impacts:							
Civic Avenue/Hayward Boulevard	T-2	Installation of signal.	10	B	5	B	56
Second Street/E Street	T-3	Conversion of NB shared left-through lane to exclusive left and through lanes, change NB and SB phasing from split to protected, change EB and WB phasing from permitted to protected.	28	D	31	D	5
Mission Blvd/Carlos Bee Blvd	T-4	Addition of third NB through lane, and addition of second SB left-turn lane.	31	D	35	D	20
Mission Blvd/Harder Road	T-5	Addition of second NB left-turn lane, addition of third SB through lane, addition of third EB through lane, addition of second WB left-turn lane, and conversion of exclusive WB right-turn lane to a shared through-right-turn-lane.	30	D	29	D	6

SOURCE: Barton-Aschman Associates, Inc., 1997.

* "Project" = Cumulative development on Walpert Ridge, including proposed Blue Rock Country Club project (see explanation under subsection 3(a)(1) in text). The Blue Rock Country Club project applicant would be responsible for funding 82.5 percent of the "project" contribution to mitigations.

Bypass (Network Scenario 1) and no construction of the SR 238 Bypass (Network Scenario 3).

(1) Project Intersection Impacts. Project impacts are those defined as degrading the level of service of an intersection operating at an acceptable level (LOS D or better) without the project to an unacceptable level (LOS E or F) with the project, or an unsignalized intersection is caused to meet Caltrans signal warrant guidelines (see "c. Significance Criteria" above). The impact analysis is based on estimated levels of service at buildout in the year 2010.

Impact T-1: Project Impacts on Farm Hill Drive/Hayward Boulevard Intersection

(Scenario 2). The projected volumes at this intersection resulting from the project would meet the Caltrans signal warrant for rural locations. This warrant would not be met by projected volumes without the project, and traffic from Walpert Ridge development would account for the majority of traffic added to the intersection. This constitutes a ***potentially significant impact*** (see Criterion #4 under "c. Significance Criteria" above).

Mitigation T-1: Require development on Walpert Ridge to fund the full cost of installing a signal that provides permitted phasing (i.e., green light without turn arrows) on all four approaches. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the impact to a ***less-than-significant level***.

The Blue Rock Country Club project sponsor and other developers on Walpert Ridge should be responsible for 100 percent of the cost of installing the signal.

(2) Cumulative Intersection Impacts. Cumulative impacts are defined as those resulting from a combination of existing traffic, project traffic, and traffic from other reasonably foreseeable future development. The project is defined as making a significant contribution to cumulative impacts when it would add sufficient traffic to an intersection to cause a delay increase of four or more seconds when the intersection would already be operating at an unacceptable level of service due to cumulative traffic growth. "Cumulative traffic" consists of existing traffic plus traffic from other approved or planned developments that are not yet built. Cumulative impacts and corresponding recommended mitigation measures are described below. Project impacts on cumulative conditions would be mitigated by a percent contribution toward necessary improvements. To secure the remaining necessary funds, the City of Hayward would monitor cumulative development and require improvements as necessary to meet the applicable roadway system performance standard.

Impact T-2: Cumulative Impacts on Civic Avenue/Hayward Boulevard Intersection (Scenario 2). The project would cause AM and PM peak hour intersection delay to increase by more than four seconds at the intersection of Civic Avenue and Hayward Boulevard where LOS F operations are expected in the AM and PM peak hours without the project. This constitutes a ***potentially significant impact*** (see Criterion #3 under "c. Significance Criteria" above).

Mitigation T-2: Since signal warrants have already been reached and the level of service rating is already F in the AM peak hour under existing conditions, require the first development on Walpert Ridge to install a signal that provides permitted phasing (i.e., green light without turn arrows) on all four approaches. Reimbursement of costs beyond the 56-percent Walpert Ridge share may come from existing deposits or a benefit district. If the signal is not constructed by the Blue Rock Country Club project, require as a condition of approval that the project sponsor fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the project's contribution to this cumulative impact to a ***less-than-significant level***.

The projected volumes at this intersection during the AM and PM peak hours, with or without the project, would meet the Caltrans' signal warrant for urban locations. There is currently \$30,654 on deposit with the City of Hayward for installation of this traffic signal; this amount was contributed by the developer of an adjacent shopping center.¹

Traffic from projected new Walpert Ridge development would account for 56 percent of the projected AM peak-hour traffic increase at the intersection at the intersection of Civic Avenue and Hayward Boulevard. The Blue Rock Country Club project sponsor and other developers on Walpert Ridge should therefore be responsible for 56 percent of the cost of installing the signal.

¹Letter from Dyana Anderly, AICP, Development Review Services Administrator, City of Hayward, to Natalie Macris, Wagstaff and Associates, re. "Preliminary Comments of City Staff on Administrative Draft Environmental Impact Report for the Blue Rock Country Club Planned Development Proposal," July 2, 1997, page 12.

Impact T-3: Cumulative Impacts on Second Street/E Street Intersection (Scenario 2). The project would cause AM peak hour intersection delay to increase by more than four seconds at the intersection of Second Street and E Street where LOS F operations are expected in the AM peak hour without the project. This constitutes a ***potentially significant impact*** (see Criterion #3 under "c. Significance Criteria" above).

Mitigation T-3: Require development on Walpert Ridge to fund five percent of the cost of (1) conversion of the northbound shared left-through lane to exclusive left and through lanes, and (2) the change of eastbound and westbound approach phasing from permitted (i.e., green light without turn arrows) to protected (i.e., green light with turn arrows). As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the project's contribution to this cumulative impact to a ***less-than-significant level***. If the remaining funding for this improvement cannot be secured, the cumulative effect on this intersection would remain a ***significant, unavoidable cumulative impact***.

These improvements cannot be accommodated within the existing curb-to-curb width. Implementation of the improvements would entail the widening of the intersection's south approach, Second Street, to accommodate the additional left-turn lane, elimination of one house, and acquisition of 12 feet of right-of-way for 100 feet with a 50-foot transition on the west side of the south approach.

Traffic from projected new Walpert Ridge development would account for five percent of the projected traffic increase at the intersection. The Blue Rock Country Club project sponsor and other developers on Walpert Ridge should be responsible for five percent of the cost of the improvements.

These measures would restore intersection operations to LOS D or better. Please refer to the Site Traffic Analysis for mitigation that would achieve LOS E at this intersection.

Impact T-4: Cumulative Impacts on Mission Boulevard/Carlos Bee Boulevard Intersection (Scenario 2). The project would cause AM and PM peak hour intersection delay to increase by four or more seconds at the intersection of Mission Boulevard and Carlos Bee Boulevard where LOS F operations are expected in the AM and PM peak hours without the project. This constitutes a ***potentially significant impact*** (see Criterion #3 under "c. Significance Criteria" above).

Mitigation T-4: Require development on Walpert Ridge to fund 20 percent of the cost of the addition of a third northbound through lane and a second southbound left-turn lane. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the project's contribution to this cumulative impact to a ***less-than-significant level***. If the remaining funding for this improvement cannot be secured, the cumulative effect on this intersection would remain a ***significant, unavoidable cumulative impact***.

These improvements cannot be accommodated within the existing curb-to-curb width. Implementation of the improvements would entail the removal and reconstruction of the curb, gutter and sidewalk; repaving and restriping on the intersection's south and north approaches; acquisition of 18 feet of right-of-way for 400 feet along the east side of the south approach; acquisition of 18 feet of right-of-way for 600 feet along the east side of the north approach; loss of 12 parking spaces on the east side of the north approach; loss of nine spaces on the east side of the south approach; loss of part of two used car lots; removal of the Elks Lodge on the east side of the south approach; and elimination of the Billiard Parlor, restaurant, Western Union, flower shop, insurance office, and glass shop on the east side of the north approach.

Traffic from projected new Walpert Ridge development would account for 20 percent of the projected traffic increase at the intersection. The Blue Rock Country Club project sponsor and other developers on Walpert Ridge should be responsible for 20 percent of the cost of improvements.

These measures would restore intersection operations to LOS D or better. Please refer to the Site Traffic Analysis for mitigations that would achieve LOS E at this intersection.

Impact T-5: Cumulative Impacts on Mission Boulevard/Harder Road Intersection (Scenario 2). The project would cause AM and PM peak hour intersection delay to increase by more than four seconds at the intersection of Mission Boulevard and Harder Road where LOS F operations are expected during the AM and PM peak hours without the project. This constitutes a ***potentially significant impact*** (see Criterion #3 under "c. Significance Criteria" above).

Mitigation T-5: Require development on Walpert Ridge to fund six percent of the cost of addition of a second northbound left-turn lane, addition of a third southbound through lane, addition of a third eastbound through lane, addition of a second westbound left-turn lane, and conversion of the exclusive westbound right-turn lane to a shared through-right-turn lane. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to this improvement. This measure would reduce the project's contribution to this cumulative impact to a ***less-than-significant level***. If the remaining funding for this improvement cannot be secured, the cumulative effect on this intersection would remain a ***significant, unavoidable cumulative impact***.

These improvements cannot be accommodated within the existing curb-to-curb width. The improvements would necessitate the widening of the northbound and southbound approach and departure lanes and the removal and reconstruction of the curb, gutter and sidewalk; repaving of the north, east, and south approaches; acquisition of ten feet of right-of-way for 600 feet on the west side of the south approach; acquisition of 12 feet of right-of-way for 160 feet on the west side of the north approach; acquisition of 12 feet of right-of-way for 400 feet on the south side of the west approach; and the elimination of 11 parking spaces along the west side of Mission Boulevard.

Traffic from the Walpert Ridge development would account for six percent of the projected traffic increase at the intersection. The project sponsors should be responsible for six percent of the cost of the improvements.

These measures would restore intersection operations to LOS D or better. Please refer to the Site Traffic Analysis for mitigations that would achieve LOS E at this intersection.

(3) Project Impacts on Fairview Avenue. The project would have the following impact on Fairview Avenue.

Impact T-6: Project Impact on Fairview Avenue. The project would add up to 319 vehicle trips in both directions on Fairview Avenue, accounting for approximately 50 percent of the total volume. As identified in the 1991 EIR, this is a ***potentially significant traffic safety impact*** (see Criterion #5 under "c. Significance Criteria" above).

Alameda County, in conjunction with the City of Hayward, is in the process of completing a draft transportation study of Fairview Avenue. The purpose of the study is to address residents' concerns about transportation problems on Fairview Avenue, including accidents, speeding, lack of adequate sight distance, lack of pedestrian and bicycle facilities, and

inadequate shoulders. The study considered a range of solutions including better lighting, signage and pavement delineation; vegetation removal to improve sight distance; improved shoulders; development of a separated, continuous pedestrian path; installation of traffic circles at intersections; and installation of speed humps. The information in the Fairview Avenue transportation study is subject to change and implementation of measures suggested in the study would require cooperation between jurisdictions. The cost for the program will vary, depending on alternatives selected, but is expected to be about \$1,000,000.

The draft study noted that the problems occurring on Fairview Avenue would be exacerbated by planned new development, including the proposed project, which would increase traffic volume on Fairview Avenue. The study, as well as the Walpert Ridge Specific Plan, recommended that the new development contribute to the funding of the improvement program; the study indicated that it was expected that development on Walpert Ridge would contribute an amount equal to the \$500,000 requirement from Centex Homes.

Mitigation T-6: Require development on Walpert Ridge to fund 50 percent of the cost of traffic calming and safety measures for the segment of Fairview Avenue between Hayward Boulevard and Five Canyons Parkway. As a condition of project approval, require the Blue Rock Country Club project sponsor to fund 82.5 percent of the total Walpert Ridge development contribution to these improvements. This measure would reduce the impact to a ***less-than-significant level***.

(4) Project Impacts on Transit. The project would create additional demand for BART service at the stations of South Hayward and Castro Valley. The increase in demand for local bus service would be negligible. The project's effects on transit would represent a ***less-than-significant impact***.

According to the travel demand model being used for the Hayward Circulation Plan Update, approximately five percent of the project-generated average weekday trips would use BART. This total transit use percentage assumption is higher than typical single-family subdivisions (where approximately two percent of the trips would be expected to use transit) because of the proximity of the project to BART.

Access to BART. Given the approximately three-mile distance between the project site and either the South Hayward BART station or the Castro Valley BART station, project access to the BART stations would be primarily by car or bus, with a few residents arriving by bicycle. No residents would be assumed to walk to BART. The project resident bus riders could be served by the proposed bus stop located at the intersection of Hayward Boulevard and Fairview Avenue. No benches or shelters are currently provided at this stop.

The distance between Blue Rock Country Club project residences and the bus stop would range from approximately one-quarter mile to approximately one mile, depending on the location of the household within the project site. Moving the bus stop to another location on the site (or adding stops) would be beneficial for project residents, but would most likely not be feasible, since the project proposes a gated entry and private roads within the project.

The decision to extend bus service to the project would be made by AC Transit, based on the cost of providing the service relative to the ridership they can expect.

Bus Route Capacity. In the future, AC Transit Line 94 is assumed to operate during commute hours only (as it currently does). An estimated 30 boardings would occur in the AM and PM peak hours combined as a result of project residents. This number is based on the assumption of five percent of the trips generated by the project occurring on transit (1,716 AM and PM trips \times 5% = 86 transit trips) and 35 percent of the transit trips using the bus (86 \times 35% = 30).

The estimated capacity of AC Transit Line 94, for both the AM and PM peak periods combined, is 330 persons, based on the assumption of three route trips in each of the AM and PM commute periods, and 55-person capacity on each bus. The 1996 ridership on Line 94 was 145. The future ridership is projected to remain approximately the same; therefore, the unused capacity of Line 94 would be approximately 185, which is more than adequate to accept an additional 30 riders.

(5) Project Impacts on CMP/MTS Facilities. The project would increase peak hour traffic on CMP/MTS facilities by a maximum of one percent under Network Scenario 2. This is a ***less-than-significant impact***.

The Congestion Management Program (CMP) and Metropolitan Transportation System (MTS) Networks in Hayward consist of freeways and key arterials, including the roadways of I-580, the SR 238 Hayward Bypass (planned for the future), SR 92, Tennyson Road, I-880, "A" Street, Mission Boulevard, and Foothill Boulevard. The impact of the project on these roadway segments under Network Scenario 2 is presented in Table 20.

A maximum of 41 (one percent) and 83 (one percent) additional vehicles would be added to I-880 and I-580, respectively, in the peak hour due to the project under Network Scenario 2, according to the distribution and traffic assignment in the travel demand model for Planning Area 2 of Alameda County (see Table 13). A maximum of 69 additional vehicles would be added to SR 92 in the peak hour due to the project, representing a two-percent increase in traffic. The project would not be expected to have a significant impact on freeway operations.

A maximum of 48 additional vehicles would be added to arterials on the CMP/MTS network in the peak hour, due to the project, specifically on Foothill Boulevard. These 48 trips would represent a one percent increase in traffic, a negligible change. The project would not be expected to have a significant impact on other CMP/MTS arterial operations. Impacts on the

Mission Boulevard/Carlos Bee Boulevard intersection are discussed in the section describing intersection impacts.

(6) Impacts of Proposed Blue Rock Country Club Circulation Plan. The circulation plan proposed by the project (see Figures 9 and 10 in section III, Project Description) would create the following potentially significant traffic safety impacts.

Impact T-7: Project Impacts on Project Entry Road/Fairview Avenue/Hayward Boulevard Intersection. This intersection would be created by the Blue Rock Country Club project, and the projected volumes at this intersection resulting from the project would meet the Caltrans signal warrant for rural locations. The project's effect on the Fairview Avenue/Hayward Boulevard intersection is a ***potentially significant impact*** (see Criterion #5 under "c. Significance Criteria" above).

Mitigation T-7: As a condition of Blue Rock Country Club project approval, require the intersection of Fairview Avenue and Hayward Boulevard to be signalized. This measure would reduce the impact to a ***less-than-significant level***.

Impact T-8: Garin Park Lane Access to School and Park. The project as proposed would not provide public street access to the proposed onsite public elementary school and neighborhood public park, since Garin Park Lane is proposed to be a private road. In addition, this roadway would not meet City of Hayward street width standards. This is a ***potentially significant traffic safety impact*** (see Criterion #5 under "c. Significance Criteria" above).

As shown in Figure 9 (Proposed Circulation Plan) and Figure 10 (Proposed Roadway Cross-Sections) in section III (Project Description), Garin Park Lane would provide access of the project entry road to the school/park site. Adjacent to the school/park site, this roadway would contain a 24-foot-wide right-of-way for travel lanes, with an eight- to ten-foot-wide multi-purpose trail on the west side. This roadway cross-section does not meet City of Hayward standards, which require a 48-foot-wide right-of-way, consisting of a curb-to-curb width of 30 feet that allows onstreet parking on one side.

Mitigation T-8: As a condition of project approval, require that Garin Park Lane from the project entry road to the end of the school/park site be dedicated to the City of Hayward as a public right-of-way. Require that a minimum 48-foot-wide right-of-way be provided for this roadway, in accordance with City of Hayward standards. These measures would reduce the impact to a ***less-than-significant level***.

Impact T-9: Sidewalks on Neighborhood Roads. Proposed neighborhood roads do not contain sidewalks. This is a ***potentially significant traffic safety impact*** (see Criterion #5 under "c. Significance Criteria" above).

As shown in cross-section 6 on Figure 10 (Proposed Roadway Cross-Sections) in section III (Project Description), proposed neighborhood roads would provide 36 feet of width for travel lanes and on-street parking, with two-foot-wide parkways and nine-foot-wide parkway and public utility easements on either side.

Mitigation T-9: Require revision of the project plans to provide sidewalks on one side of the street on proposed neighborhood roads, or other alternative pedestrian access in these neighborhoods. This measure would reduce the impact to a ***less-than-significant level***.

Impact T-10: Garin Park Lane Emergency Vehicle Access. The project plans as proposed illustrate a 14-foot travel lane with three-foot-wide shoulders along the emergency access portion of Garin Park Lane, rather than a 20-foot-wide paved roadway as discussed in the applicant-prepared Fire/Emergency Medical Services Mitigation Plan approved by the City of Hayward Fire Department. Unless special circumstances (i.e., steep slopes) can be demonstrated, failure to provide a 20-foot-wide paved roadway in this location would represent a ***potentially significant traffic safety impact*** (see Criterion #5 under "c. Significance Criteria" above).

Cross-section 8 on Figure 10 (Proposed Roadway Cross-Sections) in section III (Project Description) indicates that the Garin Park Lane emergency vehicle access would consist of a 14-foot-wide travel lane with three-foot-wide shoulders and 30-foot-wide "fuel management easement" on either side. The cross-section also contains a note indicating that, every 500 feet, the emergency vehicle access would widen to 20 feet for a distance of 50 feet. These specifications may not be consistent with the Fire/Emergency Medical Services Mitigation Plan (May 21, 1997) submitted by the applicant and approved by the City of Hayward Fire Department (see Appendix D). This plan (page 8) states that emergency vehicle accesses on the project site would consist of 20-foot-wide paved roads, except in areas where slopes are too steep to allow the 20-foot width; in these areas, a 14-foot-wide roadway would be provided, with, every 500 feet, an additional six feet of roadway width extending for a distance of 50 feet to provide fire truck turnouts.

In order to comply with these Mitigation Plan requirements, the applicant would need to demonstrate that slopes in the area of the Garin Park Lane emergency access are too steep to allow provision of the full 20-foot width, and that a 14-foot-wide roadway would be provided in accordance with Mitigation Plan specifications.

Mitigation T-10: Require (a) revision of the project plans to provide a 20-foot roadway width for the Garin Park Lane emergency vehicle access, or (b) applicant demonstration that, due to steep slopes in this area, only 14 feet of roadway width can be provided, in accordance with Fire/Emergency Medical Services Mitigation Plan provisions. This measure would reduce the impact to a *less-than-significant level*.

If option (b) is implemented, the applicant should also revise Figure 9 (Proposed Circulation Plan) to illustrate the location, length, and width of fire truck turnouts.

Table 20

PROJECT IMPACTS ON CMP ROUTES WITH THE SR 238 BYPASS--STAGE 1 (NETWORK SCENARIO 2)

Route	Segment	Peak Hour	Volume w/o Project	Volume Increase Due to Project	% Volume Increase Due to Project
I-580 eastbound	east of Eden Canyon Rd.	AM	7,064	67	1%
I-580 westbound	east of Eden Canyon Rd.	PM	5,736	83	1%
SR 238 (Mission Blvd.) southbound	south of Harder Rd.	AM	2,367	24	1%
SR 238 (Mission Blvd.) northbound	south of Harder Rd.	PM	2,243	26	1%
SR 238 (Bypass) southbound	between "A" St. and Grove Wy.	PM	1,447	127	4%
SR 238 (Bypass) northbound	between "A" St. and Grove Wy.	AM	895	130	15%
SR 92 southbound	between Orchard Av. and Harder Rd.	AM	2,872	69	2%
SR 92 northbound	between Orchard Av. and Harder Rd.	PM	2,742	47	2%
SR 92 southbound	between I-880 and Hesperian Rd.	AM	5,909	69	1%
SR 92 northbound	between I-880 and Hesperian Rd.	PM	5,994	66	1%
Tennyson Rd. eastbound	east of I-880	PM	2,554	1	0%
Tennyson Rd. westbound	east of I-880	AM	2,732	6	0%
I-880 southbound	between Industrial Pkwy. and Tennyson Rd.	AM	6,386	31	0%
I-880 northbound	between Industrial Pkwy. and Tennyson Rd.	PM	6,497	41	1%
"A" St. eastbound	between Myrtle St. and Santa Clara St.	PM	1,761	7	0%
"A" St. westbound	between Myrtle St. and Santa Clara St.	AM	1,676	6	0%
SR 238 (Foothill Blvd.) eastbound	west of SR 185 (Mission Blvd.)	PM	5,477	42	1%
SR 238 (Foothill Blvd.) westbound	west of SR 185 (Mission Blvd.)	AM	5,546	48	1%

SOURCE: Barton-Aschman Associates, Inc., 1997.

Notes:

1. Volume increase due to project reflects segment direction with highest project volume of project trips.
2. Percentages of volume increases due to project have been rounded to the nearest whole number; 0% represents less than one-half a percent.

Table 21

COMPARISON OF RECOMMENDED TRAFFIC IMPROVEMENTS--1997 SEIR AND 1991 EIR

Intersection or Roadway	1991 EIR ¹	1997 SEIR ²
Center Street/"B" Street/Kelly Street	Add southbound right, eastbound left, widen Center Street between Grove Street and Kelly Street.	No impact. There is not a significant impact at this intersection since minimal project traffic is forecasted to use this intersection.
CSUH Entrance/Carlos Bee Blvd.	Install signal and add eastbound left.	No impact. This improvement has already been constructed by the Carlos Bee Extension Project.
Campus Drive/Hayward Blvd.	Add southbound right and eliminate southbound left, add eastbound left and eliminate eastbound through.	No impact. This improvement has already been constructed by the Carlos Bee Extension Project.
Second Street/"E" Street	N/A	<i>Mitigation T-3.</i> Convert northbound shared left-through lane to exclusive left and through lanes, change northbound and southbound phasing from split to protected, change eastbound and westbound phasing from permitted to protected.
Farm Hill Drive/Hayward Blvd.	Install signal. ³	<i>Mitigation T-1.</i> Install signal.
Civic Avenue/Hayward Blvd.	Install signal.	<i>Mitigation T-2.</i> Install signal.
Fairview Avenue	Mitigation relating to traffic calming and safety should be developed and implemented for the segment of Fairview Avenue between Hayward Boulevard and "D" Street.	<i>Mitigation T-6.</i> Develop and implement mitigation relating to traffic calming and safety for the segment of Fairview Avenue between Hayward Boulevard and Five Canyons Parkway.
Mission Blvd./Carlos Bee Blvd.	N/A	<i>Mitigation T-4.</i> Add third northbound through lane and second southbound left-turn lane.
Mission Blvd./Harder Road	N/A	<i>Mitigation T-5.</i> Add second northbound left-turn lane, third southbound through lane, third eastbound through lane, and second westbound left-turn lane, and convert exclusive westbound right-turn lane to a shared through-right-turn lane.

SOURCE: Barton-Aschman Associates, Inc., Site Traffic Analysis, August 8, 1997, pages 39-41.

¹ Refers to traffic analysis for the 700- and 900-unit alternatives analyzed with SR 238 Bypass in the Walpert Ridge Specific Area Plan Environmental Impact Report (Environmental Science Associates, Inc.; Draft, February 22, 1991; and Final Addendum, May 17, 1991).

² Refers to traffic analysis in this SEIR.

³ Recommended improvement applies to 900-unit alternative only.

N/A = Intersection not addressed in 1991 EIR for scenario with SR 238 Bypass.

E. SOILS AND GEOLOGY

The following section describes existing soils and geologic conditions on the project site, criteria for determining the significance of soils and geotechnical impacts, potential project impacts related to soils and geologic conditions, and measures warranted to address identified significant impacts.

This section was prepared by the EIR geotechnical consultant, Baseline Environmental Consulting, based on review of previously performed geotechnical and geologic evaluations of the project site and limited onsite geologic and geotechnical reconnaissance. Previous studies reviewed by Baseline include: Walpert Ridge Draft Environmental Impact Report for General Plan Policies Revisions (Ecumene, 1979), Walpert Ridge Specific Area Plan, Environmental Impact Report (ESA, 1991), Geotechnical Investigation, The Ridge, a Planned Residential Community (Harlan Miller Tait, 1987), Update of Preliminary Geotechnical Investigation, 1.6 Mile Alternative Draft Grading Plan Proposed Blue Rock Country Club Project (Harlan Tait Associates, March 1997), Supplemental Letter Proposed Blue Rock Country Club Project, Hayward, California (Harlan Tait Associates, April 1997), and Comments Regarding 1.6 Mile Alternative Draft Grading Plan, Proposed Blue Rock Country Club Project (Harlan Tait Associates, May 1997).

1. SETTING

a. Regional Geologic Setting

The regional geologic setting of the project site is typical of geologic and seismic conditions in the upland areas surrounding San Francisco Bay. The project site is located on the western flank of the Hayward hills within the Coast Range Geomorphic Province.

b. Site Topography

(1) Land Forms. The 1,635-acre project site is located in an undeveloped area of east Hayward referred to as Walpert Ridge. The site consists of varied topography, including relatively gentle slopes along the dominant northwest-southeast trending Walpert Ridge and steep-sided, deeply incised stream valleys to the north and south. Ground surface elevations range from a low of approximately 800 feet above mean sea level (msl) in the incised stream valleys, to approximately 1,600 feet msl along the crest of Walpert Ridge.

(2) Slopes. Figure 27 illustrates the steepness of the slopes onsite in "percent" units. The map was prepared by Carlson, Barbee and Gibson, the applicant's civil engineer. The following slope categories are illustrated:

- less than ten percent slope,
- ten to 15 percent slope,
- 15 to 20 percent slope,
- 20 to 30 percent slope, and
- over 30 percent slope.

c. Site Geologic Conditions

Site geologic conditions are illustrated on Figure 28. Walpert Ridge is underlain by the Upper Jurassic to Cretaceous age (70 to 145 million years old) interbedded sedimentary rocks of the Great Valley Sequence (Chico Formation). The predominant rock type onsite is a massive sandstone. Although moderately weathered and fractured, the sandstone is relatively resistant and locally exposed at the surface as rock outcrops. Portions of the site are underlain by a bedrock unit consisting of thinly-bedded claystone, siltstone, mudstone, and sandstone. This unit is moderately to deeply weathered and does not typically form outcrops.

Geologic mapping and subsurface investigations¹ at the project site indicate the presence of large-scale folds and faults in the bedrock. As illustrated on Figure 28, the most prominent of these geologic structures is the Walpert Ridge syncline which traverses the central portion of the project site. The syncline is a concave fold in the bedrock with an axis oriented northwest-southeast. As illustrated on Figure 28, the axis is subparallel and west of the crest of Walpert Ridge located on the western flank. In addition to this large fold, a number of bedrock faults have been identified. As illustrated on Figure 28, the longest of these faults is subparallel to and west of the axis of the syncline. A number of smaller faults have also been identified onsite. Investigations of the faults by Harlan Miller Tait in 1987 indicate that they do not express evidence of recent movement such as surface morphology (e.g., fault scarps, sag ponds, or offset drainage channel) or displacement of young (less than 11,000 year old) sediments. Therefore, these faults are classified as inactive. Inactive faults present a negligible risk of future fault rupture.

Unconsolidated hillslope sediments (colluvium) generally cover the slopes at the project site. The thickness of colluvium is variable, depending on the location on the slopes. In general, colluvium is thin or absent near the top of ridges and interfluves (small ridges between drainages on the flanks of larger ridges). Thicker accumulations of colluvium occur on the

¹Harlan Miller Tait, Geotechnical Investigation, The Ridge, a Planned Residential Community, prepared for Hayward 1900, Inc., 1987.

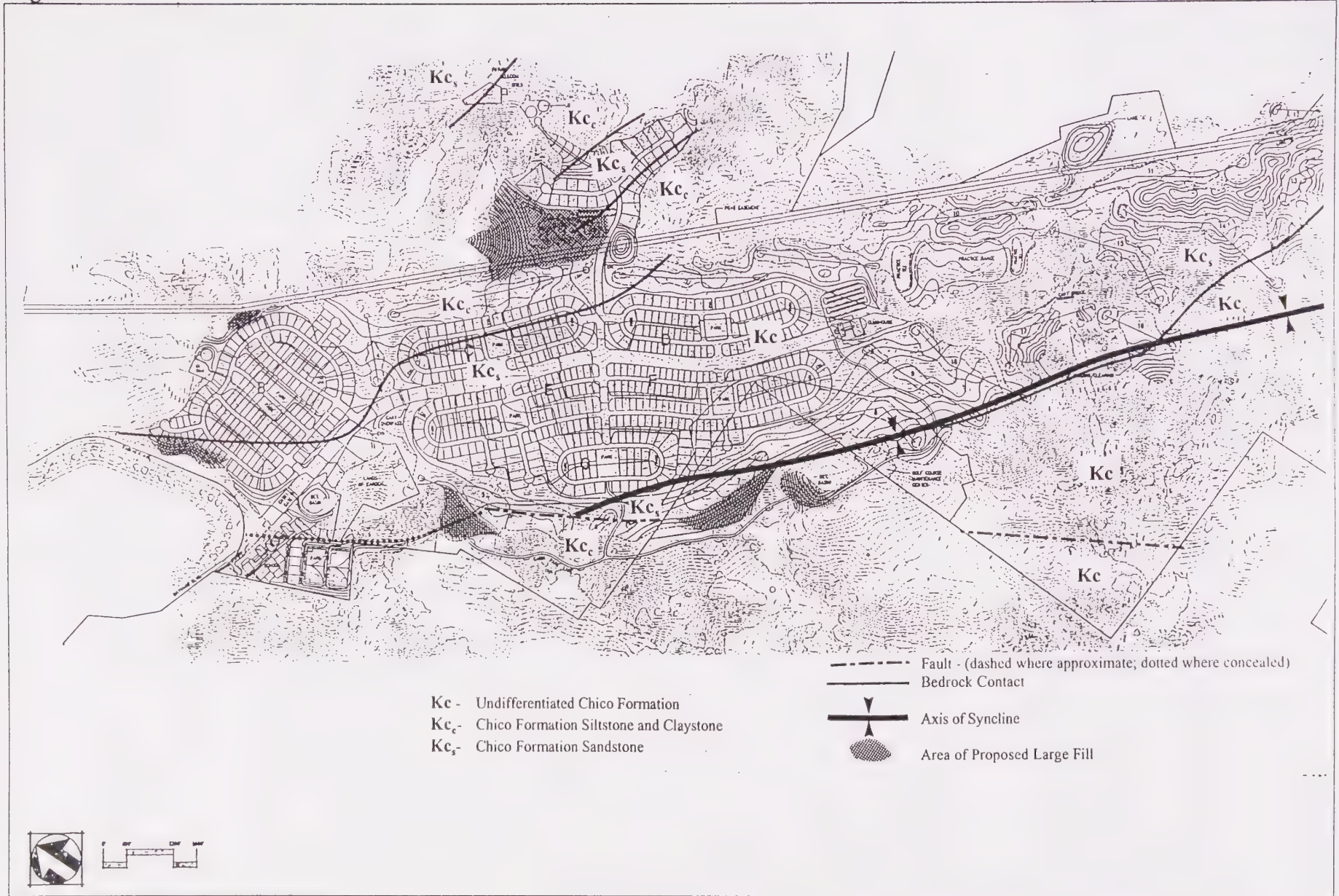
Figure 27

Slope Analysis Map



Figure 28

Project Site Geology



lower portions of slopes and within depressions (swales) on the upper portions of slopes that mark the highest expression of drainage networks (colluvial hollows or swales).

The bottoms of the valleys onsite contain a mixture of colluvium and stream-deposited sediments (alluvium). These deposits are composed of interbedded clay, silt, sand, and minor amounts of gravel. Groundwater levels in these deposits are variable, and locally are relatively high, particularly during the rainy season.

d. Soils

(1) General Characteristics. Soil is generally defined as the unconsolidated mixture of mineral grains and organic material that mantles the land surfaces. Four general soil types and eight distinct mapping units have been identified onsite by the Soil Conservation Service.¹ The soil mapping units are illustrated on Figure 29 and their characteristics are summarized in Table 22.

Topography is the strongest influence on the distribution of soil types onsite. The relatively flat ridgetops onsite contain Los Osos and Millsholm soils which are relatively shallow and developed on sandstone bedrock. Most of the sideslopes of the ridges are also mantled by the loamy Los Osos and Millsholm soils. Portions of the west facing slope of the main ridge contain Gaviota rocky sandy loam. The sideslopes of the deeply incised valleys are mapped as having Los Gatos-Los Osos complex soils. The less steep valleys contain Los Osos loam.

(2) Soil Hazards. As indicated in Table 22, onsite soils have low to moderate shrink-swell potential. Soil permeability is moderate to moderately slow for all of the soils onsite except the Gaviota rocky, sandy loams which have moderately rapid permeability. The erosion hazard is very severe in the steepest portions (45 to 75 percent slopes) of the site and slight to moderate on the ridgetop and less steep (30 to 45 percent) sideslopes.

(3) Agricultural Capability. As indicated in Table 22, the agricultural capability of the soils throughout most of the site is severely to very severely limited due to the steepness (high runoff rates and severe erosion hazards) of the slopes and shallow rooting depths. These soils are not suitable for cultivation and are primarily used as pasture and range land. The Los Osos loam and Los Osos and Millsholm soils on the gentler slopes may be suitable for irrigated pasture and dry-farmed grain.

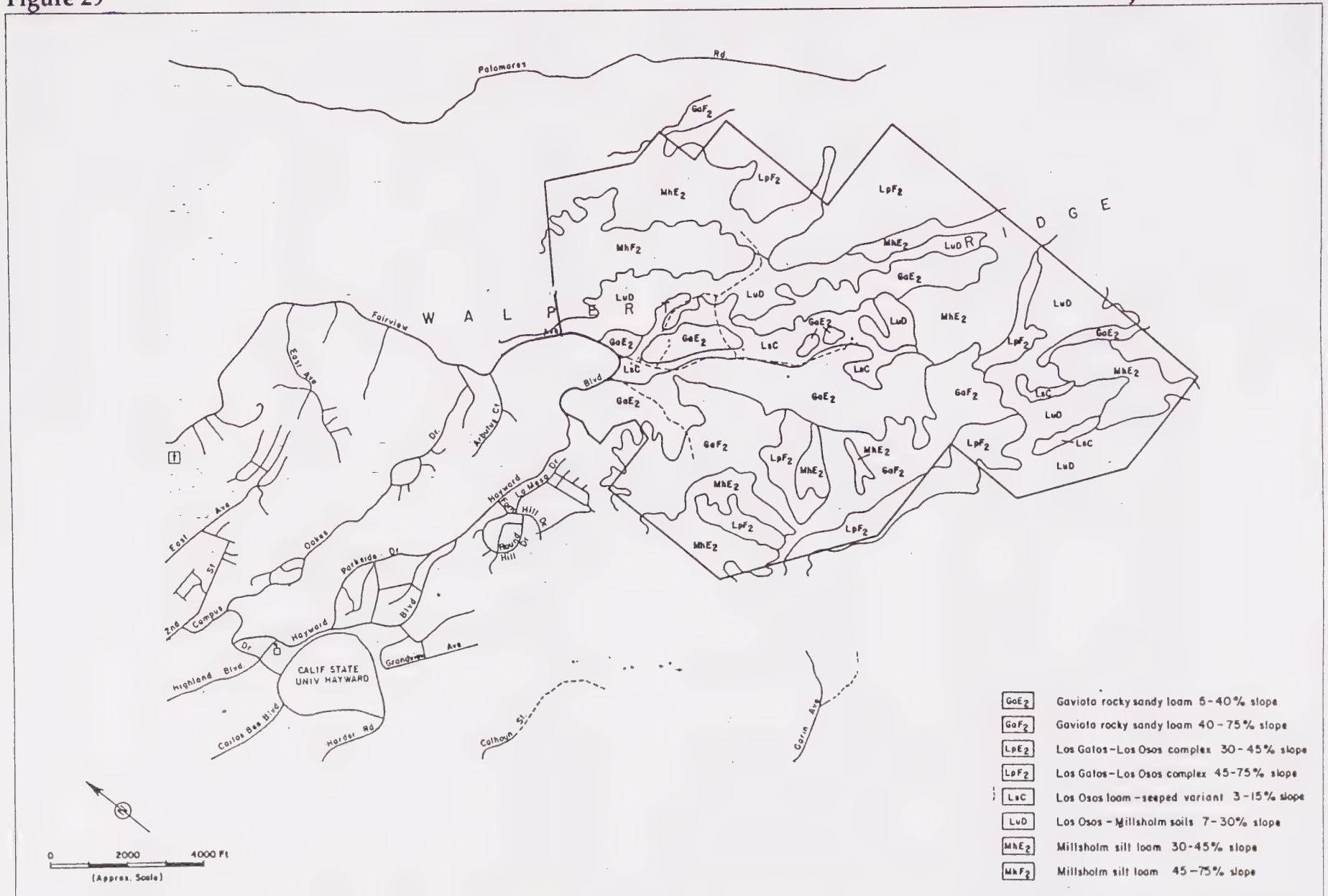
e. Slope Stability

(1) Landslides. The stability of slopes, or their susceptibility to landsliding, is dependent on a number of factors, including the strength of the underlying earth materials, the height and angle of the slope, the hydrologic conditions, and potential disturbances to the slope. The

¹U.S. Department of Agriculture (USDA), Soil Survey of the Alameda Area, California, 1966.

Figure 29

Project Site Soils



SOURCE: Ecumene Associates, 1979

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

Table 22
PROJECT SOIL CHARACTERISTICS

<u>Symbol</u>	<u>Mapping Unit</u>	<u>Slope</u>	<u>Shrink-Swell Potential</u>	<u>Erosion Hazard</u>	<u>Agricultural Capability Class¹</u>
GaE2	Gaviota rocky sandy loam	5-40%	low	slight to severe	VIe-8
GaF2	Gaviota rocky sandy loam	40-75%	low	very severe	VIIe-8
Lpf2	Los Gatos-Los Osos complex	45-75%	low	very severe	VIIe-1
LsC	Los Osos loam	3-15%	low-moderate	slight to moderate	IIIe-1
LuD	Los Osos & Millsholm soils	7-30%	moderate	moderate	IVe-3
LuE2	Los Osos & Millsholm soils	30-45%	moderate	severe	VIe-8
MhE2	Millsholm silt loam	30-45%	moderate	severe	VIe-8
MhF2	Millsholm silt loam	45-75%	moderate	very severe	VIIe-8

SOURCE: USDA, 1966, Soil Survey, Alameda Area, Alameda and Contra Costa Counties, California.

Note: Please refer to Figure 28 for mapping of soil units.

¹ The U.S. Department of Agriculture Soil Conservation Service has adopted the capability classification system for assessing the relative values of soils for agriculture. The soils with the fewest limitations are in Class I with the ratings decreasing to Class VIII for soils with the greatest limitations.

relative slope stability of the project site has been evaluated in a number of regional studies and studies within the project site boundaries. Numerous shallow landslides have been identified on the steeper slopes at the project site. Most of the slope failures have been characterized as "earthflows." An earthflow is a slowly-moving shallow slope failure. Earthflows typically occur on slopes underlain by bedrock with a high clay content, such as shale, claystone, or mudstone, or in colluvium. Some of the landslides are typical of slope failure classified as "debris flows." Debris flows reflect a compound process of formation of a shallow rotational slide ("soil slips") and moderate to rapid downslope transport (flow) of the slide mass. These types of failures are common in the moderate to steep topography within the San Francisco Bay region.

Debris flows usually develop within the unconsolidated slope deposits (colluvium) and are initiated during high rainfall events when groundwater levels are elevated. For example, a series of severe rainstorms in January 1982 resulted in over 18,000 landslides in the San Francisco Bay region, most of which were debris flows.¹ Approximately 25 debris flows associated with this storm were identified onsite.² Although these types of failures are relatively small compared to deep-seated rotational landslides or earthflows, their occurrence can cause significant damage to structures at the failure location or within the path of the slide mass.

The steep slopes of the majority of the project site have been generally classified as moderately unstable in regional slope stability mapping by the U.S. Geological Survey.³ The exception to this classification is the relatively flat portions of the ridgetops which are classified as generally stable. Burnett⁴ evaluated slope stability within the Hayward hills, including the Walpert Ridge area and the project site. The results of that evaluation (summarized in the 1979 Walpert Ridge EIR⁵) indicate that four types of unstable conditions could promote slope stability problems, including:

- areas underlain by unconsolidated valley fill deposits;

¹Ellen, S.D. and Wieczorek, G.F., Landslides, Floods, and Marine Effects of the Storm of January 3-5, 1982, in the San Francisco Bay Region, California, U.S. Geological Survey Professional Paper 1434, 1988.

²Ibid, Plate 11.

³Nilson, T.H., Wright, R.H., Valsic, T.C., and Spangle, W.E., Relative Slope Stability and Land-use Planning in the San Francisco Bay Region, California, U.S. Geological Survey Professional Paper 944, 1979.

⁴Burnett, J.L., Geologic and Seismic Factors Affecting Slope Stability of the Hayward Hills, California, California Division of Mines and Geology, 1970.

⁵Ecumene Associates, Walpert Ridge Draft Environmental Impact Report for General Policies Plan Revisions, prepared for the City of Hayward, 1979.

- canyon walls with slopes of 25 to 40 percent;
- fractured, deeply-weathered bedrock within the axis of the syncline on Walpert Ridge; and
- stable slopes within woodland areas which could become unstable if vegetation were removed.

Subsequent geotechnical evaluations have more specifically investigated subsurface conditions and slope stability at the project site. Analysis of slope stability for the 1979 Walpert Ridge EIR¹ delineated areas of relative slope stability. This analysis classified slopes between 15 and 30 percent in areas in which a high incidence of shallow (less than five feet deep) landslides have been identified as "unstable ground." In concurrence with Burnett's analysis, wooded areas on slopes greater than 30 percent were also identified as "unstable ground." The 1979 EIR analysis designated slopes of 15 to 30 percent adjacent to unstable areas, as "potentially unstable ground". Gentle slopes (less than 15 percent) underlain by bedrock at a shallow depth were characterized as "stable ground." This designation mainly applied to the relatively flat ridgetops. Based on field investigations of the subsurface conditions within the axis of the Walpert Ridge syncline, the 1979 EIR analysis did not concur with Burnett's opinion that all areas within the synclinally axis were inherently unstable.

Identification of individual slope failures on the basis of aerial photo interpretation and field mapping was presented in a geotechnical report prepared for the project site in 1987.² The report identified more than 150 individual slope failures onsite. In general, all of the failures occurred on relatively steep slopes and within colluvial deposits. These failures have the morphology of shallow rotational failures, earthflows, and debris flows. Most of the failures are relatively small (less than one-quarter acre in area) However, some individual slides and complexes of slides affect areas as large as two to three acres. Most of the slides were shallow (two to 15 feet in depth) and did not usually involve movement of bedrock.

More recent aerial photographs were evaluated in 1997 and another site reconnaissance was performed in order to update the evaluation of landslides onsite.³ This evaluation indicated that new earthflows had occurred onsite and that many existing landslides had enlarged through headward erosion and/or downslope movement of the toe of the slide.

(2) Soil Creep. In addition to slope failures, a phenomenon referred to as soil creep operates on portions of most of the slopes at the project site. Under creep, unconsolidated slope sediment near the surface of the slope moves downslope very slowly and sporadically

¹Ibid.

²Harlan, Miller, Tait, 1987, op. cit.

³Harlan, Miller, Tait, Update of Preliminary Geotechnical Investigation, Proposed Blue Rock Country Club Project, Hayward, California, prepared for YCS Investments, Inc., 1997.

under the force of gravity. Although a very slow rate of deformation occurs during creep, this process can result in damage to structures or improvements constructed on affected slopes, if not addressed in project design.

f. Seismicity

(1) Earthquake Faults in the Region. The project site is located in the seismically active San Francisco Bay Region. This area is within seismic risk Zone 4 in the Uniform Building Code (UBC).¹ The region is within the San Andreas Fault System (SAFS) which has developed along the boundary between the Pacific and North American lithospheric plates. Relative motion along this plate boundary causes the accumulation of strain within the earth's crust. Earthquakes are generated by the sudden release of this strain. Numerous seismic sources within the SAFS (see Figure 30), including the San Andreas, Hayward, Rodgers Creek, Calaveras, and San Gregorio-Seal Cove fault zones, are capable of generating moderate to large earthquakes.

(2) Nearby Faults and Onsite Fault Traces. As illustrated on Figure 30, the closest active fault, the Hayward fault zone, is located approximately 1.5 miles to the west of the western margin of the site. The results of numerous investigations conducted along the Hayward fault in the vicinity of the project site indicate that the fault is expressed as a single, relatively continuous fault trace.² The zone of faulting is well constrained and the potential of unidentified active fault traces (that may occur at the project site) is low. As discussed earlier, faults that have been identified at the site do not have evidence of recent displacement. Fault rupture would not be expected to occur within the project site.

(3) Historic and Probable Seismic Activity in the Region. The maximum expected earthquake on the Hayward fault (southern segment), the closest active fault, is moment magnitude (M_w) 7. The probability of such an event occurring between 1990 to 2020 has been estimated to be 23 percent.³ The fault generated an earthquake in 1868 which caused

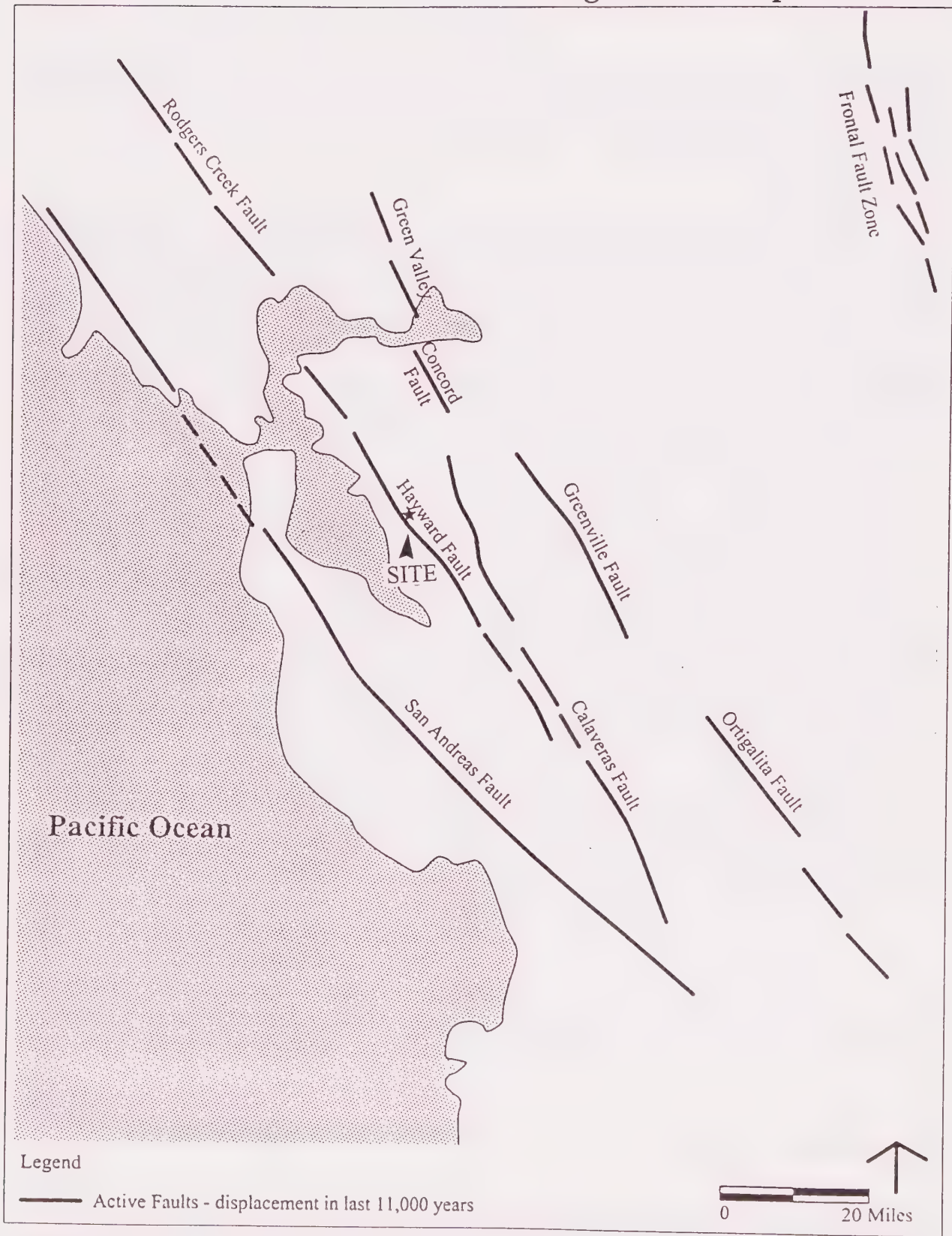
¹International Conference of Building Officials (ICBO), Uniform Building Code, Volumes 1 and 2, 1997.

²Hall, T.N. and Melody, M., Field Trip Guidebook, Second Conference, Earthquake Hazards in the Eastern San Francisco Bay Area, convened by California State University-Hayward, 1992.

³Working Group on California Earthquake Probabilities (WGCEP), Probabilities of Large Earthquakes in the San Francisco Bay Region, California, U.S. Geological Survey Circular 1053, 1990.

Figure 30

Regional Earthquake Faults



significant damage even in a then sparsely-developed East Bay region. An earthquake of this magnitude would be expected to generate strong ground shaking (MMI¹ VIII) onsite.²

The project site could be affected by moderate to large earthquakes generated by the active faults of the San Andreas Fault System. The expected peak horizontal acceleration (with a ten percent chance of being exceeded in the next 50 years) generated by any of the seismic sources potentially affecting the area including the project site is estimated by the Federal Emergency Management Agency to be between 80 and 100 percent of gravity (0.8 to 1.00g).³ The California Division of Mines and Geology more recently estimates this peak acceleration to be greater than 0.7g.⁴

g. Liquefaction

During moderate to strong ground shaking, certain types of saturated sediments can undergo a type of failure referred to as liquefaction. During liquefaction, elevated pore water pressures cause a complete and sudden loss of strength and the sediments are transformed from a solid to liquid state. In a liquid state, the sediments have no bearing capacity and can flow. The results of flow can include collapse or settlement of the ground surface. Significant damage or collapse of structures built in areas affected by liquefaction can occur.

The potential for liquefaction is low⁵ throughout most of the project site. The cohesive colluvial deposits that mantle the slopes of the project site are not generally susceptible to liquefaction. The underlying bedrock is not prone to liquefy. However, deposits on the floor of larger stream valleys within the project site may include sediments which may be liquefiable. Subsurface investigations (Harlan, Miller, Tait, 1987) onsite indicate the presence of sandy silt deposits in portions of the site. However, these sediments were located above the groundwater level at the time of the investigation (i.e. they are not saturated) and are generally stiff. These characteristics suggest that these sediments have a low potential for liquefaction.

¹The Modified Mercalli Intensity (MMI) scale presents a qualitative (descriptive) level of response of people and objects on the earth's surface to seismic shaking. The scale ranges from one to 12.

²Steinbrugge, K.V., Bennett, J.H., Lagorio, H.J., Davis, J.F., Borchardt, G., and T.R. Topozada, Earthquake Planning Scenario for a Magnitude 7.5 Earthquake on the Hayward Fault in the San Francisco Bay Area, California Division of Mines and Geology Special Publication 78, 1987.

³Federal Emergency Management Agency (FEMA), NEHRP Recommended Provisions for Development of Seismic Regulations for New Buildings, Map 8 (1:1,500,000 scale), 1992, 1991 Edition.

⁴California Division of Mines and Geology (CDMG), Probabilistic Seismic Hazard Map for California, CDMG Open-File Report 96-08, 1996.

⁵Association of Bay Area Governments (ABAG), Liquefaction Potential, San Francisco Bay Region, map (1:250,000 scale), 1980.

2. IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC AREA PLAN EIR

Table 23 summarizes soils and geology impacts and mitigation measures identified in the 1991 EIR. Whereas these mitigation measures may be generally appropriate for reducing the geotechnical impacts related to the proposed project, additional more specific mitigation measures are discussed in the subsequent "Supplement Impact Findings and Mitigation Needs" section.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Significance Criteria

According to the CEQA Guidelines,¹ exposure to people or structures to major geological hazards should be considered a significant adverse impact. For purposes of this EIR, the project may be considered to cause a *potentially significant adverse impact* if:

- (1) aspects of the project, such as grading, would alter existing geologic conditions on the site or in the surrounding area in a manner which may create unstable geologic conditions that would expose people and improved property to significant geotechnical hazards and that would last beyond the short-term construction period; and
- (2) aspects of the existing project site, such as underlying geologic soils conditions, or regional seismic conditions, would expose people and improved property to significant hazards or would present significant engineering or construction limitations.

b. Grading Approach

The applicant is proposing to mass grade the site in order to achieve usable areas for development. The proposed plan includes fill slopes that are up to 185 feet high, which would be relatively steep with horizontal to vertical ratios of between 2:1 and 3:1. The applicant's stated intent of the proposed plan is to avoid sensitive natural features, such as wetlands, trees, and rock outcroppings to the maximum extent possible. The grading quantity would be approximately 7.8 million cubic yards and would be balanced onsite with roughly equal amounts of cut and fill.²

¹State of California, Governor's Office of Planning and Research, Guidelines for Implementation of the California Environmental Quality Act, 1992, Appendix G, Item r.

²Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads, and Grading for Hayward 1900 Property, revised June 11, 1997, prepared by Carlson, Barbee & Gibson.

Table 23

1991 EIR SOILS AND GEOLOGY IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5 would require grading, excavation, and cut and fill on 310 acres, with associated soil, slope, and seismic hazards.

Mitigation Summary

(1) Require a certified or registered engineer to review and approve specific grading plans, and identify specific mitigation measures for slope stability, soils, and seismic safety. Measures may include (a) use of specifically designed pier-and-grade beam foundations; (b) lime treatment of soils; (c) use of flexible utility line materials and connectors where lines enter structures; (d) use of special design for driveways, sidewalk streets, and parking areas; (e) installation of specifically designed concrete mat foundations; and (f) preconsolidation of compressible soils prior to their development.

(2) Restrict grading operations to the dry season, and stabilize and revegetate exposed soils prior to the onset of the rainy season.

(3) Consider unit clustering as a means of reducing geotechnical impacts.

(4) Design development to balance cut and fill requirements.

(5) Require structures to be constructed under the provisions of the Uniform Building Code. Firmly attach water heaters, decorative objects, and light fixtures to walls or ceilings. Reinforce masonry chimneys. Install flexible joints on all underground pipes. Provide earthquake-activated, automatic shut-off valves with manual override on all gas and water lines. Design all structures to withstand greatest predictable ground shaking on each site.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

c. Impacts and Mitigation Measures

NOTE: The following impact and mitigation findings are intended to supplement those of the 1991 EIR.

Impact E-1: Slope Failure Impacts. Large areas of the project site contain geologic conditions conducive to the development of landslides, particularly debris flows in colluvial deposits. The potential for these slope failures cannot be completely controlled through slope design or repair. Future landsliding could damage structures or other improvements onsite. This represents a ***potentially significant impact*** (see criterion #2 under "a. Significance Criteria" above).

As described in the setting section (under e(1)), the project site includes large areas of unstable and potentially unstable slopes. The proposed project includes development of structures concentrated at and near the top of the existing ridges. In addition, large areas of excavation and filling are planned which would, if properly designed and constructed, reduce slope stability problems in the vicinity of the planned improvements. The southern portion of the site is the area with the greatest concentration of existing slope failures. Most of this area would be retained as open space with no development. A small portion would be developed as a golf course, which would not contain structures that could be damaged by slope failure. However, improvements such as cart paths, irrigation lines, and greens or fairways could be damaged by slope failures.

Other areas of proposed development at the project site contain steep slopes where potential slope failures could occur. In particular, areas of potentially deep colluvial deposits exist on most of the slopes below the ridgetops. These areas are susceptible to the development of earthflows or debris flows. Observation of the occurrence of earthflows and debris flow failures at the site have been made by geotechnical professionals¹ over the period 1982 to present. These observations indicate a significant potential for failures of this type during the life of the project. In addition, the potential for larger deeper failures exist onsite.

Although relatively small in size, debris flows can cause significant damage. The behavior of debris flows can be variable and somewhat unpredictable. For example, under very wet conditions, a debris flow mass can flow long distances at high velocities. The transport and deposition of these landslides could damage project improvements. As most of the structures proposed for the project would be constructed at the tops of the slopes, they would not likely be affected by these failures. However, headward erosion of the headscarpes of the slide could potentially impact improvements near the crest of the existing slopes. The damage

¹Harlan Miller Tait, 1997, op. cit.; Ellen and Wieczorek, 1988, op. cit.

related to debris flows would more likely affect roadways or drainage system components in lower portions of the site.

The specific components of the project that would be vulnerable to slope failure are described below:

(a) Water Tanks. The proposed location of the water tanks (east-central portion of the project site) is situated on top of a small ridge underlain by siltstone and claystone. The bedrock below the weathered zone would probably provide a suitable bearing for the tanks. However, the depth to suitable bearing materials and an analysis of bedrock structure would be necessary to confirm the geotechnical suitability of the site. The ridge is relatively narrow (100 to 200 feet wide) and bound by steep slopes. The onsite mapping of landslides indicates that the slopes adjacent to the northeastern and northwestern sides of the tanks location have moderately large earthflows within the colluvium or possibly within the claystone bedrock. The enlargement of these landslide features could present potential stability problems at the tank location (if the failures are occurring within the bedrock) and would need to be investigated by a site-specific slope stability evaluation. Although the general geotechnical conditions indicate that siting of the proposed tanks at this location is feasible, site-specific analysis would be required to determine appropriate foundation design and slope stabilization, if necessary.

(b) Swim/Tennis Club. Earthflows have also been identified on the slopes of the valley below the proposed swim/tennis club location. In this location, a site-specific analysis would also be necessary to evaluate the recency of movement of the slopes and the potential for initiation of new earthflows or debris flows.

(c) Golf Clubhouse. Although slopes failures have not been identified at the location of the proposed clubhouse, this structure would be constructed on relatively steep southwest-facing slopes. The slope may have locally thick colluvial deposits that could be prone to debris flows. In addition, this location is east of the axis of the Walpert Ridge syncline. Bedrock bedding in this area is dipping in a downslope direction (southwestward) at a dip of approximately 85 degrees. The bedding dip should be confirmed at the clubhouse site to ensure that the bedding angle does not present adverse slope stability conditions.

In addition to the potential for failures on the natural slopes, the proposed cut and fill slopes onsite have the potential for erosion and possible slope failure. Slope stability analyses for the cut and fill slopes for the project have not been presented. The proposed development plan includes fill slopes which are up to 185 feet high. The fill slopes would be relatively steep with horizontal to vertical ratios between 2:1 and 3:1. These slopes, if not appropriately designed, constructed, and maintained could become unstable.

Mitigation E-1: Require site-specific geotechnical reports, grading plan design measures, supervised grading and slope preparation, and a *Slope Management Program*. These measures would reduce potential impacts of future slope instability or failure on project structures and improvements to a *less-than-significant level*.

Continued occurrences of slope failures onsite would be expected. However, the potential impact of future slope instability or failure would be reduced by implementation of the following measures:

(a) Site-specific Geotechnical Reports. Site-specific geotechnical reports shall be prepared by a licensed Geotechnical Engineer and Certified Engineering Geologist for the proposed water tanks, clubhouse, school, and swim center. The reports shall include slope stability analysis for the slopes at the proposed locations. The analysis shall be supported by investigation of site-specific conditions that shall include but not be limited to the following information:

- (1) estimated recently of slope failures and potential for continued movement;
- (2) depth of any existing landslides, colluvial deposits, or weathered bedrock and characterization of slide plan(s), if present;
- (3) shear strength data for subsurface materials at the project site;
- (4) groundwater level data that characterizes seasonal fluctuations;
- (5) justification of seismic coefficient used in pseudo-static analysis; and
- (6) if necessary, recommendations for control of surface drainage, adequate groundwater drainage, and slide mass removal or stabilization.

(b) Grading Plan Design. All grading plans, cut and fill slopes, compaction procedures, and retaining walls shall be designed by a licensed professional engineer. All designs shall be submitted to, and approved by, the City of Hayward prior to implementation. Proposed cut and fill slope designs shall have factors of safety¹ suitable for the proposed uses adjacent to the slopes and consistent with guidelines set by the California Division of Mines and Geology for slope design in seismically active regions.²

¹In the context of slope stability analysis, "factor of safety" describe numerically the ratio of forces which drive (cause) slope failure to the forces which resist failure.

²California Division of Mines and Geology (CDMG), Guidelines for Evaluating Seismic Hazards in California, CDMG Special Publication 117, 1997.

(c) Grading and Slope Preparation. Grading and slope preparation activities shall be conducted under the supervision of a licensed Geotechnical Engineer and Certified Engineering Geologist.

(d) Slope Management Program. A Slope Management Program shall be developed and implemented by a Certified Engineering Geologist or licensed Geotechnical Engineer, who shall be responsible for identification and remediation of unstable slopes. The Slope Management Program shall identify the types of onsite hazards, and shall include an appropriate periodic monitoring plan for constructed slopes and their associated drainage systems. In addition, establish a procedure for response to slope failures affecting project improvements, including the surface drainage system. Place deed restrictions, easements, or other appropriate legal instruments on all slopes on private property to allow monitoring and remediation activities, and to require the property owners to maintain appropriate landscaping and irrigation procedures. Include provisions in the Slope Management Program for timely remediation of any identified slope problems, with implementation and funding provided through the project homeowners association or other responsible agency. Submit the Program to the City for review and approval prior to occupancy of any project homes.

Impact E-2: Damage to Structures by Soil Creep. Soil creep on and near slopes could cause damage to structures or other improvements (e.g., fences, decks). This is a **potentially significant impact** (see criterion #2 under "a. Significance Criteria" above).

Creep is a term used to describe deformation that occurs slowly under constant stress. Typically creep is defined as downslope soil movements less than one foot per decade. Creep tends to occur to the greatest degree in the surface soils of a slope and at the top of a slope. Structural damage can be caused by creep. Since surface soils creep faster than deeper soils, structures are preferentially pushed to a greater degree near the surface than deeper in the subsurface. This differential movement causes structures to lean downslope, possibly requiring repair or replacement.

Mitigation E-2: To the extent possible, avoid placing structures, utilities, and fences on or near the tops of slopes or in the shallow subsurface of slopes. Those improvements that are placed on slopes, or within ten feet of the tops of slopes, shall be approved for construction by a registered geotechnical engineer or certified engineering geologist. Potential measures for stabilizing structures affected by the impacts of creep could include extending foundations to below the creep zone, removal and replacement of creeping soils with non-expansive soils, or stabilization of creeping soil with lime-treatment or installation of geofabric. This measure would reduce impact of creep on the project to a **less-than-significant level**.

Impact E-3: Potential Long-term Deformation of Deep Fills. The proposed construction of deep fills onsite could cause adverse soil conditions which, in turn, could cause deformation of the fills. This deformation could affect the performance of foundations and other site improvements, including roadways and utility lines. This represents a ***potentially significant impact*** (see criterion #2 under "a. Significance Criteria." above).

The project proposes construction of large and deep fills. Although the fills would be designed and constructed under the requirements of an approved grading plan, the potential for settlement of the fills and related subsidence of the land surface may occur in localized areas of the project site. Minor settlement of properly constructed deep fills may be caused by primary compression which would typically occur soon after construction. However, over the last ten years, investigation of settlement of old deep fills has raised a concern amongst geotechnical professionals regarding the long-term performance of these features.¹ Older deep fills appear to be susceptible to a phenomenon typically referred to as "hydro-compression". Under this process, the water content in soils within the deeper portions of the fills increases through time and, ultimately, the soil becomes saturated. The source of water has been attributed to overwatering of landscaped areas, leaking water conveyance structures, and collection of groundwater. When these deeper portions of the fill become saturated, the compacted soil can lose strength and experience consolidation. In many cases this process would not occur until more than ten years after construction of the fill. This delayed consolidation can result in significant settlement of the ground surface. Such settlement can cause damage to improvements (structures, utilities, and pavements) which are constructed on the fills.

The relatively deep fill at the site of the proposed swim center is of particular concern. This fill, in a steep and deep valley, would be over 100 feet thick at the deepest area of the fill. The cross-sectional shape of the valley would result in variable fill thickness, presenting the potential for differential settlement of the fill. The potential for swimming pool or associated piping leakage could result in saturation of the fill and induce instability. In addition, infiltration from a detention basin, proposed for construction on this fill, could increase the potential for fill saturation.

¹Brandon, T.L., Duncan, M., and Gardner, W.S., Hydrocompaction Settlement of Deep Fills, Journal of Geotechnical Engineering, Vol. 116, 1990, pp. 1536-1547; and Rodgers, J.D., Long Term Behavior of Urban Fill Embankments, presented at the University of California-Berkeley Symposium on Foundation Conditions, July 1991, 1991.

Mitigation E-3: Address the potential for delayed consolidation within deep fills and associated land surface subsidence in the final geotechnical report for the proposed project grading plan in order to reduce associated impacts to a ***less-than-significant level***.

Provide the following types of specific recommendations in the final geotechnical report:

- (a) fill compaction specifications which consider the likelihood of eventual saturation and wetting and drying cycles for the fill materials;
- (b) specifications for removal of colluvial material or weathered rock which may be subject to consolidation under the load of proposed fills;
- (c) design specifications that minimize the variability of fill thickness within fills which underlie structures or other improvements onsite; and
- (d) specifications for design and operation of adequate subsurface drainage systems for fills (particularly for fills beneath heavily irrigated areas or other water sources such as swimming pools or detention basins). Design drainage systems for the fills to minimize maintenance and ensure long-term performance. Control flow from the drainage system so as not to cause or contribute to erosion of existing drainage channels.
- (e) specifications for design and operation of detention basins placed on fill that would limit the infiltration of water into the fill so as to control the potential for saturation of the fill.

Impact E-4: Strong Expected Seismic Shaking. Onsite ground shaking during the maximum expected earthquake on the Hayward fault could cause structural and nonstructural damage to the proposed structures. This represents a ***potentially significant impact*** (see criterion #2 under "a. Significance Criteria." above).

Although the damage by seismic shaking to structures built in compliance with the UBC requirements for seismic design would not likely cause collapse of project structures, the damage could require significant repairs. Nonstructural damage would also be expected and could include broken windows, doors, piping, ducts, and light fixtures; collapsed walls, partitions, ceilings, and stairways; or damaged contents (e.g., appliances, computer equipment, and furnishings).

Mitigation E-4: Require (a) conformance with Uniform Building Code and California Division of Mines and Geology requirements, (b) preparation of an earthquake hazards information document for homeowners, and (c) preparation of an earthquake preparedness and emergency response plan for each community facility. These mitigation measures below would reduce the impact to a *less-than-significant level*.

The potential for damage during strong seismic shaking cannot be eliminated. A similar potential for seismically-induced damage affects most areas within the San Francisco Bay region which are located near major active faults. However, implementation of each of the following mitigations would reduce the impacts of expected strong onsite seismic shaking to a less-than-significant level:

- (a) Design all structures and constructed slopes in accordance with the most recent Uniform Building Code. Analysis presented in the final geotechnical report for the project site shall conform with the California Division of Mines and Geology recommendations presented in the "Guidelines for Evaluating Seismic Hazards in California."¹
- (b) Prior to occupation of homes onsite, prepare an earthquake hazards information document and make available to all home owners. The document shall describe the potential for strong ground shaking at the site, potential effects of such shaking, and earthquake preparedness procedures.
- (c) Prior to occupation, prepare an earthquake preparedness and emergency response plan for each community use facility, including the proposed school, tennis center, swim center, and golf course clubhouse.

¹California Division of Mines and Geology (CDMG), Guidelines for Evaluating Seismic Hazards in California, CDMG Special Publication 117, 1997.

F. DRAINAGE AND WATER QUALITY

The following section describes existing conditions related to drainage and water quality, the criteria used to determine the significance of related project impacts, and significant project impacts and mitigation needs. The analysis was prepared by Baseline Environmental Consulting based on site reconnaissance and review of infrastructure studies prepared by the applicant's engineers, the Walpert Ridge Draft Environmental Impact Report for General Plan Policies Revisions¹ and the Walpert Ridge Specific Area Plan, Environmental Impact Report.²

1. SETTING

a. Climate

The climate of the Hayward area is characterized as Mediterranean, with cool wet winters and warm dry summers. The mean annual rainfall in the vicinity of the project site, the majority of which falls between October and April, is approximately 23 inches.³ Analysis of long-term precipitation records indicates that wetter and drier cycles, lasting several years, are common in the region. Severe, damaging rainstorms occur at a frequency of about once every three years.⁴

b. Drainage and Flooding

(1) Topography. The 1,635-acre project site is located in an undeveloped area of east Hayward referred to as Walpert Ridge. The site consists of varied topography, including

¹Ecumene Associates, Walpert Ridge, Draft Environmental Impact Report for General Plan Policies Revisions, prepared for the City of Hayward, 1979.

²Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, 1991.

³Rantz, S.E., *Mean Annual Precipitation and Precipitation Depth-Duration-Frequency Data for the San Francisco Bay Region, California*, U.S. Geological Survey, Open File Report 3019-12, October, 1971.

⁴Brown, William M. III, *Historical Setting of the Storm: Perspectives on Population, Development, and Damaging Rainstorms in the San Francisco Bay Region*, in *Landslides, Floods, and Marine Effects of the Storm of January 3-5, 1982, in the San Francisco Bay Region, California*, Stephen D. Ellen and Gerald F. Wieczorek, Eds., U.S. Geological Survey Professional Paper 1434, 1988.

relatively gentle slopes along the northwest-southeast trending ridge and steep-sided, deeply incised stream valleys to the north and south. Ground surface elevations range from a low of approximately 800 feet above mean sea level (msl) in the incised stream valleys, to approximately 1,600 feet msl along the crest of Walpert Ridge.

(2) Drainage. As illustrated on Figure 31, the project site contributes storm water runoff to three watersheds: Palomares Creek to the east, Dry Creek to the west, and Ward Creek to the north. During storms, these creeks receive surface water flow from several unnamed tributaries and overland flow. Palomares and Dry creeks connect with Alameda Creek, and are located within the Alameda Creek Watershed. Water flowing in these creeks evaporates, infiltrates into the subsurface, or eventually discharges into San Francisco Bay through the Coyote Hills Alameda County Flood Control Channel. Ward Creek flows to the west through the City of Hayward and drains to the Bay. Runoff from the project site, particularly runoff draining to Palomares and Dry Creek, is an important source of water to maintain riparian habitat in Garin Regional Park and Dry Creek Pioneer Regional Park and other downstream areas.

In an undeveloped setting such as the project site, when rainfall intensities exceed the infiltration capacity of surface soils, runoff flows over the ground surfaces toward established natural drainage channels. Storm water runoff is then conveyed away from the area in creeks and streams.

(3) Flooding. According to the Federal Emergency Management Agency (FEMA), the project site is not susceptible to regional flooding hazards.¹ The project site is not located within mapped dam failure inundation areas.² The elevation of the project site (ranging from 800 to 1,500 feet above mean sea level) and distance from the coast preclude potential inundation by coastal hazards, such as tsunamis, extreme high tides, or sea level rise.

c. Water Quality

The quality of surface and groundwater onsite is affected by land uses within the entire watershed. Drainage from the site could affect the quality of water in larger creeks and drainages downstream. If persistent degradation of surface waters were to occur, groundwater quality could be affected at infiltration/recharge areas.

(1) Water Quality Regulation. Water quality in surface and groundwater bodies is regulated primarily by the State and Regional Water Quality Control Boards. The project site is under

¹Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM), Alameda County, California (Unincorporated Areas), Map Index, 17 December (site covered by unprinted Community Panel Number 06001 0185A), 1987.

²Association of Bay Area Governments (ABAG), Map of *Dam Failure Inundation Areas, San Francisco Bay Region*, March, 1980.

Figure 31

Project Site and Vicinity Drainage Features



the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB), which is responsible for implementation of state and federal water quality protection statutes and regulations in the vicinity of the project site.

Water quality of runoff is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Program (established by the Clean Water Act); the program objective is to control and reduce pollutants to water bodies from nonpoint discharges. The program is administered by the California Regional Water Quality Control Boards. The San Francisco Bay RWQCB issues NPDES nonpoint source permits for discharges to water bodies in the San Francisco Bay region for municipalities and major industries.

Projects disturbing more than five acres of land during construction are required to file a Notice of Intent (NOI) to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activity. A developer must propose control measures that are consistent with the State General Permit.

(2) Surface Water. Surface water occurs onsite in seasonal drainages and various springs. Water quality monitoring data for these surface water features are not available. However, water quality in the creeks is affected by land uses within the watershed and past and current agricultural practices (i.e., grazing) in the vicinity may contribute to increased nutrient loading and sediment supply to the creeks. Anecdotal data collected from creeks in the vicinity of the project site indicate that elevated levels of bacterial contamination may occur in surface water.¹

The Alameda County Water District (ACWD) is a retailer of potable water to the cities of Fremont, Newark, and Union City. A substantial portion of the water supplied by the ACWD is derived from runoff from the Alameda Creek Watershed, including State Water Project entitlement water which is transported via Alameda Creek. Potential degradation of water quality in surface water runoff which enters Alameda Creek, could eventually enter the groundwater aquifer, affecting drinking water supplies for several hundred thousand users.

(3) Groundwater. Geologic conditions limit the occurrence of groundwater onsite to an area along the western edge of the site, where a broad syncline has generated conditions to support a small perched aquifer.² Limited groundwater quality data are available for the groundwater underlying the site. Several groundwater wells were reported to produce water with elevated levels of boron (greater than 1.0 mg/L).³

¹Ecumene, 1979, op. cit.

²Balance Hydrologics, letter to Steven Miller, President and Chief Executive Officer, Hayward 1900, Inc., March 21, 1997.

³Ecumene, 1979, op. cit.

2. IMPACT AND MITIGATION FINDINGS—1991 SPECIFIC AREA PLAN EIR

Table 24 summarizes hydrology and water quality impacts and mitigation measures identified in the 1991 EIR. Based on review of the 1991 EIR and the details of the proposed project, mitigation needs to be updated to fully mitigate potential impacts associated with Drainage and Water Quality for this project. The Supplemental Impact Findings and Mitigations Needs section presented below provides specific impact analysis and mitigation measures for the proposed project. The Supplemental Impact Findings and Mitigations Needs are consistent with the general findings in the 1991 EIR, but provide greater detail.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Significance Criteria

Based on CEQA Guidelines,¹ implementation of the proposed project would be considered in this EIR to have a *significant adverse drainage or water quality impact* if it would:

- (1) expose people or structures to substantial new or increased flooding (in the case of the proposed project, this could result from substantial changes in the rate and volume of storm water runoff leaving the site);
- (2) result in a noticeable loss of flood-carrying capacities within downstream storm drain facilities and receiving waters;
- (3) result in the substantial degradation of surface or groundwater quality; or
- (4) substantially interfere with groundwater recharge.

b. Proposed Project Drainage Approach

Figure 32 illustrates the proposed project storm drainage plan. The proposed storm drainage system would be designed to collect and convey storm water runoff through a closed-pipe collection system that would convey flows through the project to detention basins. As illustrated on Figure 32, four detention basins are proposed that would be used to regulate peak storm water discharges in an attempt to avoid increases in downstream flooding due to the project.

Detention basins are proposed for each watershed subarea onsite, except the golf course. Development of the golf course would result in little change in the impervious surface area

¹State of California, Governor's Office of Planning and Research, Guidelines for Implementation of the California Environmental Quality Act, 1992, Appendix G, Items f-i and Item q.

Table 24

1991 EIR HYDROLOGY AND WATER QUALITY IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5 would alter drainage on up to 310 acres, uncovering some surfaces that are currently protected from erosive rainfall and runoff. Drainage alteration may also concentrate naturally dispersed runoff into specific channels, speeding up the erosion process. In addition, development would introduce certain common urban pollutants into site drainages. Development would also increase peak runoff flow in Palomares and Dry Creeks.

Mitigation Summary

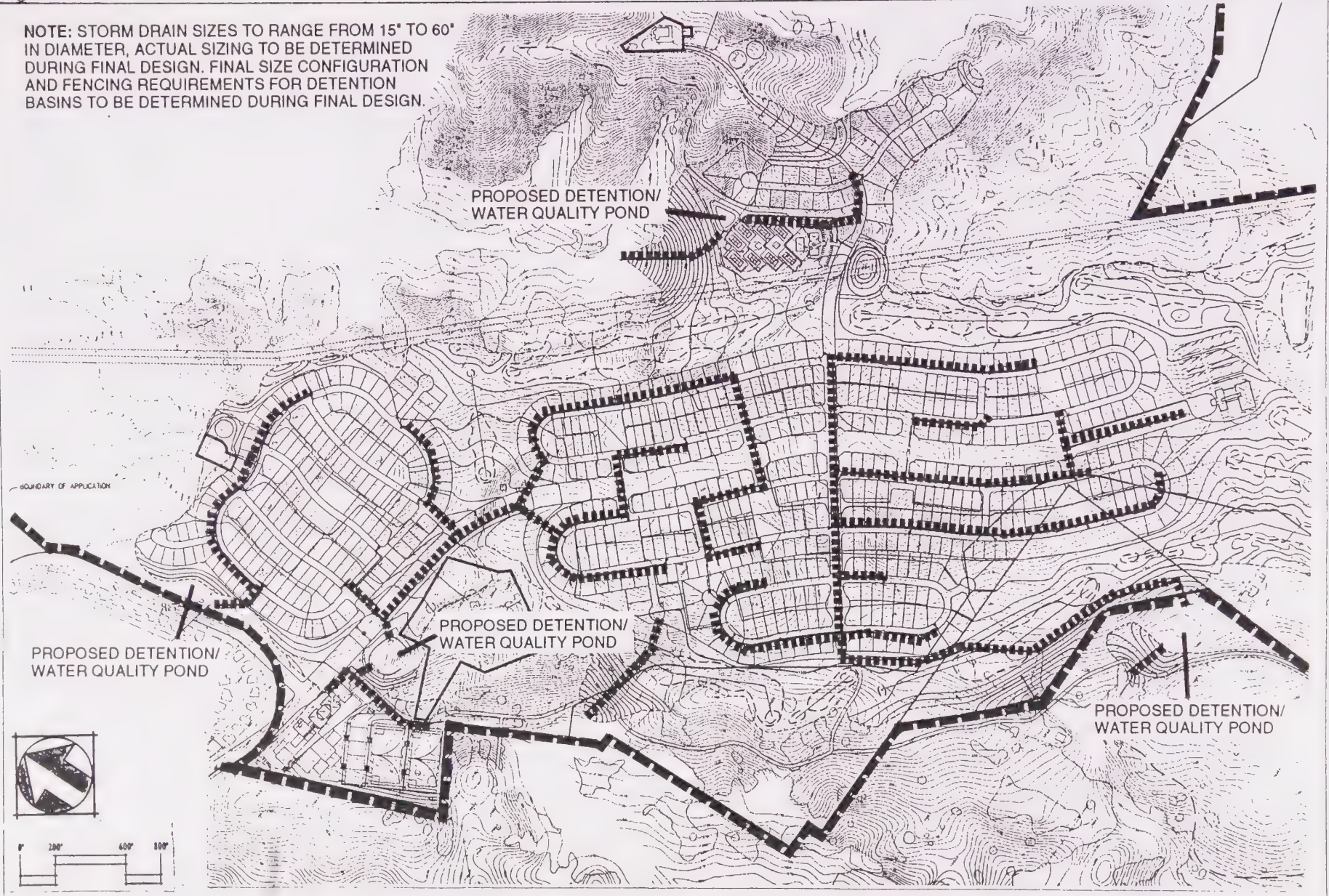
Require development plans to minimize areas of new impermeable surfaces by providing for multi-story structures and/or unit clustering; and by using natural materials for paths, driveways, flood control structures, and/or minimizing roadway and driveway surfaces. Establish a maximum impervious surface coverage standard per lot. Use detention basins to control peak flows at pre-development levels. Channel runoff through slowest route. To minimize erosion, sedimentation, and water quality problems, grading should be minimized; retain vegetation where possible, and concentrate development in areas where soil losses will be least. Minimize steep cut and fill. Require erosion control planting on slopes. Provide grease traps, sediment basins, and silt traps. Review and approve a detailed sediment control plan.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, 1991.

Figure 32

Project Site Storm Drainage Plan

NOTE: STORM DRAIN SIZES TO RANGE FROM 15" TO 60" IN DIAMETER, ACTUAL SIZING TO BE DETERMINED DURING FINAL DESIGN. FINAL SIZE CONFIGURATION AND FENCING REQUIREMENTS FOR DETENTION BASINS TO BE DETERMINED DURING FINAL DESIGN.



and would not be expected to cause any measurable increase in peak storm water flow rates.¹

c. Impacts and Mitigation Measures

NOTE: The following impact and mitigation findings are intended to supplement those of the 1991 EIR.

Impact F-1: Storm Drainage System Capacity. Increased runoff resulting from creation of new impervious surfaces could leave the site, potentially exceeding capacity of conveyance structures downstream. Interception of the runoff could degrade downstream riparian habitat. This represents a ***potentially significant impact*** (see criteria #1 and #2 under "a. Significance Criteria," above).

Development of the project site, particularly areas proposed for residential development, would result in an increase in the amount of impervious surfaces (buildings, paved roadways and driveways). Undeveloped, vegetated lands generally have low runoff coefficients, meaning that they yield a relatively small portion of the total rainfall as runoff. The majority of the precipitation, particularly in smaller storms, infiltrates into the subsurface. Impervious surfaces yield nearly all rainfall as runoff. Increased runoff volume could exceed the capacity of downstream drainage components, causing localized flooding. The golf course would not be expected to significantly increase runoff volumes relative to existing conditions.

A preliminary drainage plan² and Storm Drain System Map have been developed for the project. The storm drainage plan is illustrated on Figure 31. The preliminary plan and map indicate that each of the residential neighborhoods would be drained by closed subsurface storm drain pipes. The runoff would be collected in a series of detention basins designed to regulate peak storm water discharges. According to the applicant, the detention basins would be designed and operated to meet City of Hayward and Alameda County Flood Control and Water Conservation District (ACFCWCD) standards. An ACFCWCD representative has indicated that the ACFCWCD is not willing to take responsibility for maintenance of the proposed detention basins.³ Improper management of releases from the detention basins could adversely affect downstream riparian habitat by significantly altering water delivery patterns.

¹Carlson, Barbee & Gibson, Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads, and Grading for Hayward 1900 Property, Hayward, California, June 11, 1997.

²Ibid.

³Borrmann, Karen, Associate Engineer, Alameda County Flood Control and Water Conservation District, personal communication with BASELINE Environmental Consulting, July 8, 1997.

Mitigation F-1: As a condition of approval, require that the final grading and drainage plans for the project demonstrate (a) that the proposed drainage plan would not increase peak flows downstream of the project site to a level that would adversely affect downstream riparian habitat or exceed the capacity of existing facilities; and (b) that all onsite drainage components are designed in compliance with City of Hayward and Alameda County Flood Control and Water Conservation District (ACFCWCD) standards. The proposed detention basins shall be maintained by the homeowner's association with annual inspections conducted by the City of Hayward, unless the ACFCWCD agrees to assume maintenance responsibility. As a condition of approval of the final drainage plan, require that a detention basin operation and maintenance plan be developed by the applicant. The homeowners' association shall submit annual reports to the City Department of Public Works. The City shall review the annual reports and schedule inspections of each detention basin each year prior to the rainy season to ensure that provisions of the operation and maintenance plan are being implemented. These measures would reduce project impacts on storm drainage system capacity to a *less-than-significant level*.

The applicant's detention basin operation and maintenance plan shall include specific procedures for operation of the basins, a schedule of required wet and dry weather inspections, and maintenance procedures (e.g., vegetation control, sediment removal, culvert/channel clearing). The homeowners' association's annual reports shall include wet and dry season inspection reports, documentation of removed sediment disposal (if any), and discussion of any required amendments or modifications to the operations and maintenance plan.

Impact F-2: Stormwater Runoff Water Quality Impacts. Construction activities and post-construction site uses could result in degradation of water quality in nearby surface water bodies by reducing the quality of storm water runoff. This represents a *potentially significant impact* (see criteria #3 under "a. Significance Criteria," above).

(a) Construction-Period Erosion and Sedimentation. Implementation of the project would result in mass grading of the site. The grading quantity would be approximately 7.8 million cubic yards with final fill slopes with horizontal to vertical ratios between 2:1 and 3:1. The proposed grading activity would require temporary disturbance of surface soils and removal of vegetative cover. During the construction period, grading and excavation activities would result in exposure of soil to runoff, potentially causing erosion and sedimentation in the runoff. Soil stockpiles and excavated parcels onsite would be exposed to runoff and, if not managed properly, the runoff could cause erosion and increased sedimentation in storm sewers or water courses onsite and downstream. The accumulation of sediment could result in blockage of flows, potentially resulting in increased localized ponding or flooding.

(b) Construction-Period Pollutants. The potential for chemical releases is present at most construction sites. Once released, substances such as fuels, oils, paints, and solvents could be transported to nearby surface waterways and/or groundwater in storm water runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters.

(c) Vehicle-Related Pollutants. Increased vehicle use and potential discharge of associated pollutants would be expected during both the construction and operational phases of the project. Leaks of fuel or lubricants, tire wear, and fallout from exhaust contribute petroleum hydrocarbons, heavy metals, and sediment to the pollutant load in runoff being transported to receiving waters. Long-term degradation of water quality runoff from the site could degrade water quality in Palomares, Dry, and Ward creeks. One or more aboveground or underground fuel storage tanks would likely be installed to fuel golf course maintenance equipment. Leaks or spills associated with operation of a fueling system could be exposed to storm water runoff, degrading water quality.

Mitigation F-2: Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project site. The SWPPP shall include Best Management Practices (BMPs) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP shall reduce or eliminate impacts to surface water quality from all phases of the project. Implementation of these measures would reduce the project impact on storm water runoff water quality to a *less-than-significant level*.

Required elements of the SWPPP include:

(a) Erosion and Sediment Control. Best Management Practices (BMPs) designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the slopes. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. If hydro seeding is selected as the primary soil stabilization method, then slopes shall be seeded by September 1 and irrigated to ensure that adequate root development has occurred prior to October 1. Entry and egress from the construction site shall be carefully controlled to minimize offsite tracking of sediment. Vehicle and equipment wash down facilities shall be designed to be accessible and functional both during dry and wet conditions.

An additional source of information regarding BMPs is the California Storm Water Municipal and Construction Activity BMP Handbooks¹ (Storm Water Quality Task Force, 1993). The selection of BMPs required for a specific project is based on the size of the development and the sensitivity of the area.

(b) Construction-Period Storm Water Management Controls. These controls shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g. fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain.

An important component of the storm water quality protection effort is knowledge of the site supervisors and workers. To educate onsite personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.

The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. City of Hayward personnel shall conduct regular inspections to ensure compliance with the SWPPP (this is already standard procedure). RWQCB personnel, who may make unannounced site inspections, are empowered to levy considerable fines if it is determined that the SWPPP has not been properly prepared and implemented.

(c) Post-Construction Stormwater Management. The SWPPP shall include post-construction storm water management controls to prevent storm water pollution associated with post-construction activities at the developed site. Controls may include disconnected gutters, pervious concrete surfaces, painted drain inlets ("Dump No Waste-Drains to Creek"), and stream protection buffers. The SWPPP shall include BMPs to minimize potential impacts to water quality from operation of the fuel system. In addition, the SWPPP shall refer to other regulations and plans (e.g., spill prevention plan) required for fuel tank operation.

The most beneficial time to consider post-construction storm water quality features is prior to development of the final grading plan and design of the project. The RWQCB has issued "*Staff Recommendations for New and Redevelopment Controls for Storm Water Programs*"² (1994) to encourage the incorporation of BMPs for post-construction activities into new projects. The proposed project would be considered "Tier 3" (proposed residential project

¹Storm Water Quality Task Force, California, California Storm Water Best Management Practice Handbooks: Municipal, Construction Activity and Industrial/Commercial, March, 1993.

²Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), *SF Bay Regional Water Quality Control Board Staff Recommendations for New and Redevelopment Controls for Storm Water Programs*, February 24, 1994.

greater than five acres) and recommended BMPs include education/training, landscape control, litter control, labeling storm drains, runoff control, site planning, swales or sand filters, street sweeping, common car wash area, and treatment control designed to meet performance goal. At present, these BMPs are not required, but encouraged to be used to the "maximum extent practicable." The developer of the SWPPP shall also review and implement as many measures as practical from *Start at the Source, Residential Site Planning and Design Guidance Manual for Storm Water Quality Protection*.¹

In addition, the applicant shall comply with New Development Project Conditions.² The applicant indicated the intention to comply with these guidance documents in the *Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads, and Grading for Hayward 1900 Property, Hayward, California* and in the *Walpert Ridge Golf Course Summary*.³

Impact F-3: Golf Course Runoff Water Quality Impacts. The application of golf course fertilizers and pesticides for turf grass maintenance could result in increased long-term water quality degradation in nearby creeks. Also, the leaching of nitrates and pesticides may cause chemicals to enter the groundwater table. This represents a **potentially significant impact** (see criterion #3 under "a. Significance Criteria," above).

The project includes a new 18-hole golf course. Improper golf course design and management practices can cause runoff to contain significant amounts of nutrients and pesticides. Nitrogen and pesticide compounds may also leach through soil layers and contact groundwater. Additionally, beneficial nontarget soil organisms, wildlife, and aquatic systems may be exposed to pesticides. The two categories of impacts include: (a) the potential runoff and leaching of nitrates and phosphorus, the basic compounds of turf grass fertilizer; and (b) the potential runoff and leaching of pesticides.

(a) Nitrate Runoff and Leaching. Nitrogen-based fertilizers are used on golf courses to encourage turf grass growth and regeneration. Nitrates have been associated with several environmental problems including eutrophication, altering the productivity of natural ecosystems, and acid rain. The effects of nitrates on human health is also a concern. The

¹Bay Area Stormwater Management Agencies Association (BASMAA), Start at the Source, Residential Site Planning and Design Guidance Manual for Stormwater Quality Protection, Draft, August 25, 1996.

²Alameda County Urban Runoff Clean Water Program, *New Development Project Conditions*, April 25, 1995.

³Bryan Grunwald Associates, *Walpert Ridge Golf Summary*, letter submitted to Ms. Joanna Callenbach of YCS Investments, May 23, 1997.

U.S. Environmental Protection Agency recommends the maximum concentration of ten parts per million (ppm) of nitrates in drinking water. Larger concentrations have been known to cause birth defects, cancer, nervous system impairments and "blue baby" syndrome.

During heavy storms or excess irrigation when water does not percolate, nitrates may be carried offsite by runoff. Areas of turf grass that drain directly into a creek without berms or swales intercepting surface flows, or areas that are not buffered by native grasses or dense vegetation separating the maintained turf grass from the drainage way, may allow nitrates and phosphorus to enter the drainage by surface flow. However, proper grading and drainage and dense turf grass can reduce runoff to near zero for typical storm events. Turf grass has one of the lowest runoff coefficients (0.10 to 0.35) of any surface.¹

The leaching of nitrates into groundwater depends on the water solubility of the nitrogen-based fertilizer, the persistence of the fertilizer compound, the rate at which the nitrate-containing leachate percolates into the soil, and the depth to the groundwater table. Recent studies have shown that the leaching of nitrates and phosphorous compounds is minimized when the amount of applied irrigation water is equal to the evapotranspiration rate of the turf.^{2,3} The majority of the nitrates and pesticides are taken up by the plant or reside in the dense thatch layer of healthy turf grass or root zone. The more persistent and water soluble the nitrogen-based fertilizer is, the greater likelihood the nitrates may percolate. Sandy soils tend to permit greater percolation while clay-based soils inhibit leaching, but encourage greater runoff when the soil is saturated.⁴

During germination and initial growth of the turf grass, fertilization is increased to encourage rapid germination and turf grass maturation. Fertilization may occur as frequent as once a month rather than once every two to four months for mature turf grass. During grow-in, more irrigation water is required to keep the seedbed wet to encourage full germination. Young turf grass shoots require frequent watering to avoid drying out. Also, until full germination and some maturation of the turf grass, near bare soil conditions exist. The above factors contribute to increased runoff and increased potential for nitrate and sediment runoff. This runoff, particularly siltation, could impact sensitive drainages if not controlled.

¹Maidment, D.R., Handbook of Hydrology, McGraw Hill, Inc., 1993.

²Petrovic, A.M., The Fate of Nitrogenous Fertilizers Applied Turfgrass, *Journal of Environmental Quality*, 19, 1990.

³Augustin, B.J.; Synder, G.H., *Moisture Sensor-Controlled Irrigation for Reducing Leaching Bermuda Grass Turf*, Agronomy J. 76, 1984.

⁴Geron, C., et al., *Nitrate Leaching from Turfgrass on a Fine-Textured Soil*, Golf Course Management, July, 1993.

(b) Pesticide Runoff and Leaching. The pesticides typically used on golf courses consist of herbicides, fungicides, and insecticides. Pesticide application can cause water quality impacts if pesticides are applied in areas which directly run off into sensitive drainages. The method by which pesticides run off into sensitive drainages is similar to that of nitrates discussed above. Pesticides are typically applied less frequently than fertilizers, usually to specifically address pest problems as they become evident. Areas requiring the most intensive management, putting greens and tees, usually receive the greatest quantity of pest control. Tees and greens are usually sand-based encouraging percolation of rain water rather than runoff even in the largest storm events.

Any pesticide that is tightly absorbed or bound to soil or organic matter is less likely to volatilize, leach, be degraded by microorganisms, or even be adsorbed by plants. Aside from organic matter, clay particles play the greatest role in retarding pesticide movement.¹ The negatively charged ions of chemical particles readily attach to the positively charged ions found in clay. Most of the soils onsite are high in clay content. The mobility of chemicals through the native soil would be limited by the relatively slow percolation rate of the soil and the ability of the clay-based soils to adsorb and bind the pesticide. However, sand-based greens and tees offer the pesticide residue the opportunity to leach quicker until they meet the native soil or are collected in subsurface drains.

Greens and tee areas would be underlain by drain lines that collect excess rain and irrigation water and transport it away from the green or tee basin. Leachate collected in subsurface drains usually discharges at grass swales or the irrigation storage lakes. Where leachate discharge points are adjacent to sensitive drainages or in swales close to drainages, leachate may enter the drainages. Dense turf grass helps deter the movement of leachate, encourages further percolation, and slows the movement of nitrates and pesticides through the soil.

Mitigation F-3: Mitigate potential water quality impacts associated with the proposed project by preparing and implementing two plans designed to protect water quality: a *Golf Course Design and Management Plan*, and a *Water Quality Monitoring Plan*. Implementation of these measures would reduce potential impacts associated with golf course runoff to a ***less-than-significant level***.

(a) Golf Course Design and Management Plan. Develop and implement a Golf Course Design and Management Plan to reduce or eliminate impacts on surface water quality from golf course operation and maintenance. All but one of the required elements of the plan listed below are identified in the *Walpert Ridge Golf Course Summary letter report*.² The only

¹Geron, 1993, op. cit.

²Bryan Grunwald Associates, 1997, op. cit.

additional elements of the plan are measures (5), "Manage Fertilizer Use," and (6) "Certified Golf Course Superintendent."

(1) *Minimize Golf Course Runoff into Nearby Creeks.* Maintain a minimum of a ten-foot natural vegetated buffer between the edge of irrigated turf grass and the top of bank of sensitive drainages. Design golf course grading so that all maintained turf areas drain away from nearby creeks. Direct drainage to grassed swales, area drains, or sumps for percolation. Where maintained turf cannot drain away from creeks, use low maintenance turf or naturalized or native grasses.

The grading and drainage plans shall indicate the flow of golf course drainage away from sensitive drainages. Areas of maintained turf grass which drain towards sensitive drainages shall be minimized and identified on the grading plans. Separate areas of the golf course that drain toward sensitive drainages with vegetated natural buffer areas, as identified above, or use low maintenance turf grasses. High maintenance areas such as tees, fairways, and greens shall not drain into sensitive drainages.

Leave areas between golf holes in naturalized grasses to catch and obstruct runoff. Where this is not possible, in particular where there are long continuous slopes, grade areas between golf holes to minimize high velocity flows.

(2) *Manage Discharge from Subdrains.* Drain pipe discharge points from subdrains of greens or tees shall drain into vegetated swales or irrigation storage lakes. The subdrain discharge points shall not be within 100 feet of a sensitive drainages. Direct discharge pipes to dense turf grass areas that can act as a biotic filter and allow percolation. Indicate the location of all drainages on the grading and drainage plans.

(3) *Minimize the Use of High Maintenance Turf Grass.* Design the golf course to minimize the amount of high maintenance turf grasses where possible. Use turf grasses that require less fertilization such as fescues and ryegrass for larger areas of turf grass. Use native plants or ornamental grasses "out-of-play areas." Indicate the turf grass type on the turf grass or "grassing" plan.

Use an efficient irrigation system, including a means of matching watering requirements with the evapotranspiration rate of the plants. Recycle runoff back into the irrigation system through use of irrigation storage lakes as collectors, wherever possible. Indicate these requirements on the irrigation plans.

(4) *Prepare and Implement an Integrated Pest Management Plan (IPM).* An IPM shall be prepared by a qualified agronomist or turf grass specialist approved by the City of Hayward. The IPM shall be approved prior to the seeding and germination of turf grass. The IPM shall address and recommend methods of pest prevention and turf grass management that use pesticides as a last resort in pest control. Specify types and rates of fertilizer and pesticide

application. Special attention in the IPM shall be directed toward avoiding runoff of pesticides and nitrates into sensitive drainages or leaching into the shallow groundwater table.

Minimize the use of pesticides on the golf course. Only use pesticides in response to a persistent pest problem. Do not employ preventive chemical use. Cultural and biological approaches to pest control shall be more fully integrated into the IPM with an emphasis toward reducing pesticide application.

(5) *Manage Fertilizer Use.* Lower fertilizer requirements for turf grass germination and maturation by ensuring topsoil is maintained or replaced during grading operations to sustain the organic quality of the native soil. Use organic amendments such as sludge, manure, fir bark, or peat, which will greatly increase the organic quality of the soil and greatly reduce fertilizer needs. These organic amendments also increase percolation rates and act as stronger binder for the adsorption of fertilizer and pesticide compounds. Perform soil tests prior to seeding to determine the proper fertilization rates pre- and post- seeding. Detail how fertilization requirements are to be reduced during turf grass grow-in.

(6) *Certified Golf Course Superintendent.* The Golf Course Design and Management Plan shall be implemented, and the golf course managed, by a Certified Golf Course Superintendent (CGCS). A CGCS is required to have a college degree in plant science or related subject, experience as a golf course superintendent, pass a rigorous written exam, and participate in applicable continuing education.

(b) *Prepare and Implement a Water Quality Monitoring Plan.* Prepare and implement a Water Quality Monitoring Plan designed to evaluate the effectiveness of the SWPPP (discussed above under *Mitigation F-1*) and Golf Course Design and Management Plan at protecting surface and groundwater quality in the vicinity of the site. The Water Quality Monitoring Plan shall be prepared by the applicant and submitted to the City of Hayward for review and approval prior to issuance of grading permits. The Walpert Ridge Golf Course Summary states that the "effects of nitrates and pesticides applied to the golf course should be monitored,"¹ but does not provide specific requirements for the type of monitoring. The plan shall include the following:

(1) *Establish Sampling Locations.* Establish fixed surface and groundwater sampling locations in the plan. Collect surface water samples from detention basin outlets during the first significant storm event of the rainy season each year ("first flush"). In addition, collect surface water samples from creeks that drain the proposed golf course. Collect groundwater samples from shallow monitoring wells installed in areas of high groundwater conditions, particularly in alluvial sediments along the seasonal creeks and near detention basins.

¹Bryan Grunwald Associates, 1997, op. cit., page 7, 4th paragraph.

(2) *Establish Sampling Parameters, Protocols, and Frequency.* Establish the compounds to be analyzed for based on the uses of the site. For example, analyze samples collected from areas which drain the golf course for the specific pesticide and herbicide compounds used on the course. Establish the required sampling protocols and frequency for each sampling event so that consistent high quality data can be compiled.

(3) *Establish Data Analysis and Review Criteria.* Establish criteria for evaluating the data (e.g., regulatory threshold values for pollutants). Once collected, the data shall be analyzed by a qualified professional and compared to the established criteria to evaluate potential impacts. If water quality degradation is identified, the qualified professional shall recommend actions to mitigate the impact. Submit reports summarizing the analytical data and conclusions to the City of Hayward for review and approval on an annual basis for a minimum of ten years. If, at the end of the ten-year period, the City of Hayward determines that, based on the analytical data collected to date, no impact to water quality has occurred, or is likely to occur, from operation of the project, the City may authorize the applicant to discontinue monitoring.

Blue Rock Country Club Project
City of Hayward
September 4, 1997

Draft SE
IV.F. Drainage and Water Qua
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G. PUBLIC HEALTH AND SAFETY

This section describes the environmental setting, potential health and safety impacts, and recommended mitigation measures related to (1) potential fire hazards, and (2) electric and magnetic fields from onsite electrical transmission lines.

1. WILDLAND FIRE HAZARDS

a. Setting

The project site and surrounding area contain steep terrain that is densely covered by oak woodland and coastal scrub vegetation. These conditions, combined with high winds associated with the ridgetop setting, create significant hazards for wildland fires. The State Fire Marshal and the City of Hayward have classified the site as a "high fire hazard" area.¹

(1) Hillside Design and Urban/Wildland Interface Requirements. The City of Hayward has adopted Hillside Design and Urban/Wildland Interface Guidelines² that establish fire safety standards and guidelines for hillside development. These standards and guidelines address building design standards for hillside dwellings, such as requirements for Class A roofs, fire sprinklers, one-hour fire-rated siding and walls, double-paned windows, and enclosure of decks. Other standards address site planning, fire-resistant and drought-tolerant landscaping, fire and emergency access, and fuel management at the urban/wildland interface (boundary).

(2) Walpert Ridge Specific Plan Requirements. The Walpert Ridge Specific Plan³ contains additional fire management guidelines that supplement the Hillside Design and Urban/Wildland Interface Guidelines and respond to the specific topographical conditions on Walpert Ridge. The Specific Plan requires that a fuel management zone be established around the perimeter of the residential development. The width of the zone would depend on vegetation type, slope gradient, and the design characteristics of adjoining lots and dwellings. The Specific Plan requires that vegetation within the zone be modified and maintained (e.g., by a homeowners' association) to reduce the risk of exposure of dwellings to wildland fires. The Specific Plan

¹John Boykin, Fire Chief, City of Hayward Fire Department; personal communication, June 13, 1997.

²City of Hayward, Hillside Design and Urban/Wildland Interface Guidelines, February 16, 1993, adopted by Resolution 93-037.

³City of Hayward, Walpert Ridge Specific Plan, July 25, 1995.

includes a conceptual fire management plan to illustrate the scope of the fuel management program. The Specific Plan also includes guidelines for emergency vehicle access, open space management, and common area landscaping.

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Section IV.H(1) (Public Services, "Fire Protection/Emergency Medical Services") addresses 1991 EIR impact and mitigation findings regarding fire hazards.

c. Supplemental Impact Findings and Supplemental Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant fire hazard impact* if it would:

- (a) Increase fire hazard in areas with flammable brush, grass, or trees;¹
- (b) Create a health hazard or potential health hazard;²
- (c) Expose people to existing sources of potential health hazards;³ or
- (d) Result in possible interference with an emergency response plan or emergency evacuation plan.⁴

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact PHS-1: Project-Related Wildland Fire Hazards. Project-related urban development and human activity would increase the potential for wildland fire and hazards associated with this type of fire. Project residents, golf course patrons, and other project occupants could be exposed to a wildland fire that could originate from onsite or surrounding open space. This would represent a ***potentially significant impact*** (see Criteria a through d under "(1) Significance Criteria" above).

¹CEQA Guidelines, Appendix I, Item IX.e.

²CEQA Guidelines, Appendix G, Item v, and Appendix I, Item IX.c.

³CEQA Guidelines, Appendix I, Item IX.d.

⁴CEQA Guidelines, Appendix I, Item IX.b.

The project proposes 650 single-family housing units and a golf course (including a clubhouse, restaurant, and other facilities) to be located at the urban/wildland interface and along the ridgeline. The applicant proposes that a homeowners' association be responsible for fire hazard abatement in common areas, such as landscaped areas.

The project would be a gated community served by privately-maintained roads. An emergency access road and adjacent "fuel management easement" would be provided along Garin Park Lane south of the joint school/park site to the golf clubhouse (see section III, Project Description). An additional emergency vehicle access road would extend west off Garin Park Lane into the adjoining Bailey property, providing a secondary means of egress. (See Figure 6 in section III.) In a fire emergency, helicopters would have access to the site by landing on cul-de-sacs or on the golf course.¹ The project would provide two water tanks (with a total storage capacity of approximately 2.3 million gallons) that would provide water for fire, emergency, and operational purposes. Golf course lakes would store water that could be used in an emergency.

The applicant has proposed a Fire/Emergency Medical Services Mitigation Plan² for the project that contains requirements for structural fire protection (building setbacks, roof eaves, glazing, exterior walls, fencing, roof systems, attic vents, spark arrestors, sprinkler systems, exterior decks and patio covers, structural addressing, outdoor storage, and chimney locations), a fuel management program, and standards for water supply, road patterns, gates, and other project features. The City of Hayward Fire Department has reviewed the Mitigation Plan in draft form.³ Appendix D of this SEIR contains the proposed Mitigation Plan.

Mitigation PHS-1: Require the project to comply with (a) the "Urban/Wildland Interface Guidelines" contained in City of Hayward Hillside Design and Urban/Wildland Interface Guidelines; (b) City of Hayward Walpert Ridge Specific Plan policies regarding fire management; (c) the applicant-proposed Fire/Emergency Medical Services Mitigation Plan, as approved by the City of Hayward Fire Department; and (d) applicable Building Code and Fire Code regulations. Require the applicant to retain a fuel management consultant to work with the City of Hayward to achieve project compliance with applicable regulations. This measure would reduce the impact to a ***less-than-significant level***.

¹Larry Arfsten, Fire Marshal, City of Hayward Fire Department; personal communication, June 16, 1997.

²Hunt Research Corporation, Fire/Emergency Medical Services Mitigation Plan for the Blue Rock Country Club Project, City of Hayward, May 21, 1997.

³Boykin.

Impact PHS-2: Cumulative Wildland Fire Hazards. The project would contribute to a cumulative increase in urban development and human activity in the Walpert Ridge area, increasing the potential for wildland fire and hazards associated with this type of fire. This is a ***potentially significant cumulative impact*** (see Criteria a through d under "(1) Significance Criteria" above).

Development of a golf course and single-family housing (650 units) on the project site, combined with single-family residential development on the nearby Bailey and Carden properties, would produce an estimated total of 805 new housing units in the Walpert Ridge area. This new development would increase the population potentially exposed to wildland fire, and greater human activity in the area would in turn increase the potential for a wildland fire to occur.

Mitigation PHS -2: Require future applicants for development in the Walpert Ridge area to prepare Fire/Emergency Medical Service Mitigation Plans subject to City of Hayward Fire Department approval, and to comply with (a) City of Hayward Hillside Design and Urban/Wildland Interface Guidelines, (b) City of Hayward Walpert Ridge Specific Plan policies regarding fire management, and (c) applicable Building Code and Fire Code regulations. This measure would reduce the impact to a ***less-than-significant level***.

2. ELECTRIC AND MAGNETIC FIELDS

a. Setting

(1) Onsite Transmission Line Characteristics. The project site contains a 75-foot-wide PG&E electrical transmission line easement that extends in a northwest-southeast direction through the central portion of the project site (see Figure 5 in section III, Project Description). This easement, known as the "Contra Costa Power/Newark 230 kV Line," carries 230 kilovolts (kV) of electricity.

PG&E prohibits the location of any structures or other permanent obstructions within transmission line easements that would inhibit maintenance access to a transmission line or tower. Typical landscaping, parking areas, and fencing are generally allowable. Beyond these easement requirements, PG&E has not adopted any additional guidelines or criteria for residential or other setbacks from transmission lines.

(2) Definition of Electrical and Magnetic Fields. Electric and magnetic fields (EMFs) are present throughout the environment. All electrical devices, including home appliances, office equipment, and electrical transmission lines, produce electric and magnetic fields. The electrical power type normally delivered to U.S. communities is alternating current (AC). AC power reverses direction 120 times per second (60 hertz).

The transmission line crossing the project site creates electric and magnetic fields in the vicinity of the "conductor" (the transmission line). The change in voltage over distance is known as the *electric field*. The unit of measure used to describe an electric field is volts per meter (V/m) or kilovolts per meter (kV/m). The electric field becomes stronger near a charged object and decreases with distance from the object. Electric fields can be shielded by most materials.

Magnetic fields are caused by the electric current flowing in the conductor. The most common unit of measure used to describe magnetic field intensity in the United States is the Gauss (or milliGauss, one-thousandth of a Gauss). Unlike electric fields, magnetic fields cannot be easily shielded.

(3) Potential Health Effects of Transmission Line EMF Exposure. The question of possible health effects due to EMF exposure has generated a considerable amount of research. Recent epidemiological reports (since 1979) have suggested a possible association between occupational and residential exposure to power line EMFs and adverse health effects. These studies have found statistically significant associations between power line configuration and childhood cancers and between electrical occupations and leukemias, lymphomas, brain cancers and male breast cancer. Other recent studies have found no correlation between magnetic fields and adverse health effects. Because the results of the studies have varied, additional research is underway to obtain more information on the effects of magnetic fields.

(4) Development Guidelines. There are currently no known federal, State of California Public Utilities Commission (PUC), City of Hayward regulations regarding setbacks from electric power lines to limit electric and magnetic field exposure. A few states have adopted electric field guidelines, and two states have established a magnetic field standard. Table 25 summarizes these guidelines and standards. The purpose of most of these current state guidelines and standards is to ensure that field levels from new power lines do not exceed field levels from existing lines, or to avoid the nuisance effects from the electric fields of larger transmission lines. In addition, the California PUC, PG&E, and the California Department of Education have adopted the following recommendations, requirements, and standards in response to electrical transmission line safety concerns:

California PUC Recommendations. In response to public concern, the California Public Utilities Commission (PUC) initiated a process to provide more specific guidance regarding EMF exposure. On January 15, 1991, the PUC issued an Order Instituting Investigation "...to develop policies and procedures for addressing the potential health effects of electric and magnetic fields of utility facilities." The PUC stated that "...the scientific community has not reached consensus on the nature of any health impacts from contact with electric and magnetic fields," and, given the ubiquitous nature of magnetic fields, that "it is extremely

Table 25

STATE REGULATIONS THAT LIMIT FIELD STRENGTHS ON TRANSMISSION LINE
RIGHTS-OF-WAY

<u>State</u>	<u>Field Limit</u>
Montana	1 kV/m at edge of ROW in residential areas
Minnesota	8 kV/m maximum in ROW
New Jersey	3 kV/m at edge of ROW
New York	1.6 kV/m at edge of ROW; 200 mG at edge of ROW
North Dakota	9 kV/m maximum in ROW
Oregon	9 kV/m maximum in ROW
Florida	10 kV/m maximum for 500 kV lines in ROW; 2 kV/m maximum for 500 kV lines at edge of ROW; 8 kV/m maximum for 230 kV and smaller lines in ROW; 3 kV/m maximum for 230 kV and smaller lines at edge of ROW; 200 mG for 500 kV lines at edge of ROW; 250 mG for double circuit 500 kV lines at edge of ROW; and 150 mG for 230 kV and smaller lines at edge of ROW.

SOURCE: Enertech Consultants, Inc., 1994.

*difficult for scientists and regulators to isolate the impact of utility-related exposures on public health."*¹

In October 1991 the PUC requested recommendations for interim actions from a PUC-established "EMF Consensus Group" regarding the potential health effects from EMFs. On March 20, 1992, the EMF Consensus Group published a report advising the PUC on an interim regulatory response regarding EMF concerns. Some members advocated erring on the side of caution and argued that it would be prudent to exercise foresight now by taking reasonable steps to avoid additional transmission line EMF exposure, since the costs of such actions may be comparatively minimal compared to increasing setbacks later after urbanization has occurred, and since the actions might reap substantial benefit. Other members believed that without the clear establishment of a cause-and-effect relationship and the identification of a bio-active component of EMFs, the idea of field management to lower transmission line EMF exposure levels would not be justified on a scientific basis.²

The Consensus Group did agree, however, to formulate several compromise recommendations for consideration by the PUC regarding EMF research, education, policy, and procedure, including the following:

- *Field Reduction.* The PUC should adopt an interim policy that authorizes utilities to implement no-cost or low-cost steps to reduce EMF exposure in response to public concern and scientific uncertainty.
- *Guidance for the Public.* Concerned individuals should educate themselves on EMF issues to decide if they wish to avoid EMF exposure. In the absence of specific knowledge of health impacts from EMFs, or which characteristics of EMF might be of concern, individuals should make their own decisions for action, including "prudent avoidance."
- *Other Policy Consensus Recommendations.* Six additional policies address (a) guidance for utility workers, (b) taking public concern into account when siting new electric facilities, (c) support for authorization for utilities to undertake EMF measurements at residences and workplaces, and (d) encouragement of cooperative dialogue among industries such as appliance, electrical equipment, and the building industry.

Following these Consensus Group recommendations, the PUC in November 1993 issued a policy recommendation that established a five-year research program to investigate the potential health effects of electric and magnetic fields from utility facilities. The State

¹State of California Public Utilities Commission, Report of the California EMF Consensus Group: Issues and Recommendations for Interim Response an Policy Addressing Power Frequency Electric and Magnetic Fields (EMFs), March 20, 1992.

²Ibid.

Department of Health Services (DHS) is conducting this research program. DHS has requested a time extension for completion of the program.¹

PG&E Requirements. PG&E imposes setback requirements for electric transmission lines within its easements. However, these are based on access needs rather than on public health concerns. Beyond these internal easement requirements, PG&E has not adopted any additional guidelines or criteria for residential or other urban development setbacks from electric transmission lines.

California Department of Education Standards. The School Facilities Planning Division of the California Department of Education has formulated a policy that establishes minimum setbacks between electric transmission line ROWs and new schools. Although the division acknowledges that there is no hard evidence proving that exposure to power lines causes adverse health effects, they have taken a conservative stance and recommend the following minimum setbacks for new school structures:

- 100 feet from the edge of the easement of a 100-110 kV line,
- 150 feet from the edge of the easement for a 220-230 kV line, and
- 350 feet from the edge of an easement for a 500-550 kV line.²

b. Impact and Mitigation Findings—1991 Specific Area Plan EIR

Table 26 summarizes electric and magnetic field impacts and mitigation measures identified in the 1991 EIR.

c. Supplemental Impact Findings and Supplemental Mitigation Needs

(1) Significance Criteria. Based on the information in the "Setting" section above regarding existing standards, guidelines, and recommendations relative to electric and magnetic fields, the project would be considered in this SEIR to have a *potentially significant health and safety impact* if it would:

- (a) Result in the construction of school structures within 150 feet of a 75-foot-wide or 100-foot-wide 230 kV easement (the minimum setback established by the State Department of Education).

¹Bruce Kaneshiro, Regulatory Analyst, Public Utilities Commission; personal communication, July 17, 1997.

²Stan Rose, Consultant, School Facilities Planning Division, California Department of Education, personal and written communication, April 10, 1992.

Table 26

1991 EIR IMPACT AND MITIGATION FINDINGS REGARDING ELECTRIC AND MAGNETIC
FIELDS

Impact Summary

Magnetic fields from electrical transmission lines can cause biologic changes in living tissues, but it is uncertain whether there is any risk to human health associated with them.

Mitigation Summary

Prohibit construction of residential structures within the 150 milligauss contour (of PG&E electrical transmission lines), to be determined.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- (b) Result in the construction of residential structures within 150 feet of a 75-foot-wide or 100-foot-wide 230 kV easement. As no federal, state or local standard has been established for the location of residential structures relative to high voltage electrical transmission lines, the State Department of Education minimum power line setback standards for school structures were applied in this SEIR to residential structures in order to provide a conservative (i.e., "worst-case") analysis of potential impacts.

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact PHS-3: Exposure of Housing Units to EMFs. Residential structures on approximately nine lots in proposed project Neighborhood A and one lot in Neighborhood G could be located within 150 feet of the existing 75-foot-wide 230 kV PG&E electrical transmission line easement that extends through the project site, possibly exposing residents to electric and magnetic fields (EMFs). This represents a **potentially significant impact** (see Criterion b under "(1) Significance Criteria" above).

Based on the preliminary development plan proposed by the project applicant (see Figure 6 in section III, Project Description), the boundaries of approximately nine single-family residential lots in the eastern portion of Neighborhood A and one single-family residential lot in the western portion of Neighborhood G fall within 150 feet of the PG&E easement. Depending on the actual location of these property lines and the siting of residential structures on these lots, residents may be exposed to EMFs. A joint school/park site, proposed for the western portion of the site, would not be located in the vicinity of the PG&E easement.

Because there is no conclusive evidence regarding the health risks of EMF exposure, the actual significance of this impact cannot be determined. Applying California Department of Education school setback recommendations to residential uses, however, EMF exposure for residential uses within 150 feet of the edge of the PG&E easement would represent a *potentially significant health and safety impact*.

Mitigation PHS-3: Require residential structures to be set back a minimum of 150 feet from the electrical transmission line easement on the project site. This measure would reduce the impact to a **less-than-significant level**.

The significance of the health risks associated with different levels of electric and magnetic field exposure has not been officially established. However, it is prudent to reduce exposure to electric and magnetic fields when possible. To limit electric and magnetic field exposure within the project area, the project should be modified and/or standards incorporated as necessary so that proposed project residential structures (and outdoor living areas, if possible) are located a minimum of 150 feet from the edge of the PG&E transmission line easement. These setbacks shall reflect the recommendations for new schools formulated by the School

Facilities Planning Division of the California State Department of Education, and other more stringent applicable setback standards that may be established in the future.

H. PUBLIC SERVICES

1. FIRE PROTECTION/EMERGENCY MEDICAL SERVICES

NOTE: Please refer to section IV.G, Public Health and Safety, for discussion of impacts and mitigation measures that address wildland fire risks.

a. Setting

(1) Fire Stations, Staffing, and Equipment. The City of Hayward Fire Department provides fire protection and emergency services throughout the city, and employs a staff of 142 people. Currently, nine firefighters are certified as paramedics. The Department is currently providing paramedic training to 26 other staff members, and expects to hire seven or eight additional paramedics by January 1, 1998. The Department's goal is to have at least 40 paramedics on staff July, 1998. The Department requires that all newly hired firefighters be certified as paramedics.¹

The Department currently maintains eight operating fire stations, which house a total of eleven fire companies. These consist of nine engine companies, which are first responders and provide fire suppression, and two truck companies, which provide structure entry, ventilation, laddering, and rescue operations. Station 1 maintains two engine companies, and the remaining seven stations house one engine company. Stations 1 and 7 also house truck companies.²

The Department participates in mutual aid agreements for fire suppression, rescue, and emergency medical services through (1) the South Zone Mutual-Aid Plan (with San Leandro, Alameda County, Fremont, and Newark), (2) the Alameda County Mutual Aid Plan (with all other fire departments in Alameda County, and (3) the California Fire and Rescue Master Mutual-Aid Agreement (with all other fire departments in California).³

The closest operating fire station to the project site is Station No. 5, located at 28595 Hayward Boulevard, near Skyline Drive about one-half mile west of the site (see Figure 3 in section III,

¹Larry Arfsten, Fire Marshal, City of Hayward Fire Department; personal communication, July 18, 1997.

²John Boykin, Fire Chief, City of Hayward Fire Department; personal communication, June 13, 1997.

³Boykin.

Project Description). Station No. 5 is equipped with one engine company and is staffed by three fire-fighters, and provides the first response to service calls in the project area. Stations No. 1 and No. 2 provide second response.¹

(2) Response Time Goals. The Department measures level of service by response time, among other criteria. As stated in the City of Hayward General Plan Growth Management Element,² response time goals are the following:

- a. The first engine company should arrive within five minutes of the initial alarm.
- b. The first truck company should arrive within seven minutes of the initial alarm.
- c. The balance of the first alarm assignment should arrive within 10 minutes of the initial alarm.

(3) Response Times to Project Site. In accordance with the City of Hayward General Plan Growth Management Element³ and the Walpert Ridge Specific Plan,⁴ Station No. 5 provides a five-minute response to calls within 1.5 miles of the station (measured in driving distance), including the project site up to the *Urban Limit Line* boundary (see Figure 15 in section IV.A, Land Use and Open Space). The Specific Plan allows the Hayward City Council to approve an extension of residential use up to 0.1 mile beyond the 1.5-mile service area.⁵ Second response to the project site from Stations No. 1 and No. 2 meets the seven-minute and ten-minute response time goals established by the *Growth Management Element*.

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 27 summarizes fire protection service impacts and mitigation measures identified in the 1991 EIR.

¹Boykin.

²City of Hayward, City of Hayward General Plan Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of January 9, 1996, page 51.

³Ibid. Standard 4 states that "development in the hill area should not occur further out than the 1-1/2 mile service area of Fire Station 5."

⁴City of Hayward, Walpert Ridge Specific Plan, July 25, 1995, Policies A-1 through A-3, page 19.

⁵Ibid.

Table 27

1991 EIR FIRE PROTECTION IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 housing units within a 1.5-mile travel distance of Fire Station No. 5 would require the addition of a truck company at Station No. 5 and reconstruction of the station to house the truck company. Development in areas beyond the 1.5-mile travel distance would require construction of an additional fire station on Walpert Ridge and relocation of Station No. 5 to the State University area. Two new apparatus would be required, a "Quint" truck and an additional wildland fire truck. One new fire company would be required for the new fire station on Walpert Ridge.

Mitigation Summary

For development within a 1.5-mile travel distance of Fire Station No. 5: reconstruct Station No. 5 to accommodate an additional new, fully-equipped "Quint"-type apparatus and a crew of three (total of nine new employees for all shifts).

For development beyond a 1.5-mile travel distance of Fire Station No. 5: (1) dedicate a minimum of one acre of flat land, centrally located and within a 1.5-mile travel distance of any development, as an additional fire station site; and (2) provide two new apparatus, a "Quint" truck and an additional wildland fire truck. Relocate Station No. 5 to the State University area.

Additional measures for all development: (1) require installation of fire hydrants along roadways at 400-foot intervals, and compliance with Hayward's fire flow requirement for single-family housing developments (1,500 to 2,000 gallons per minute at a two-hour duration); (2) clear brush as required by Appendix E of the Uniform Fire Code; (3) provide all-weather surface engineered streets that can handle 60,000-pound vehicles, are a minimum of 20 feet wide, and provide a turnaround for fire vehicles if the access is a dead-end and more than 150 feet long; (4) require relatively flat, wide streets with generous turning radii, easy access for ground ladders, and sufficient emergency egress for occupants; and (5) require developers to hire a City-approved fire protection consultant to determine which areas are subject to Category I or Category II of the Urban/Wildland Interface Construction and Fuel Management Requirements.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on fire protection and emergency medical services if it would:

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including fire protection services;¹
- (b) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element* ²) and the Walpert Ridge Specific Plan,³ or
- (c) Exceed Fire Department response time standards of (1) first engine company arriving within five minutes of the initial alarm, (2) first truck company arriving within seven minutes of the initial alarm, and (3) the balance of the first alarm assignment arriving within ten minutes of the initial alarm.

(2) Impacts and Mitigation Measures. *NOTE: Unless otherwise noted, the following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact PS-1: Project-Related Demand for Fire Protection and Emergency Medical Services. The project would increase the demand for fire protection and emergency medical services provided by the City of Hayward Fire Department. This is a ***potentially significant impact*** (see Criterion a under "(1) Significance Criteria" above).

Urban (i.e., single-family residential) development proposed by the project would be located within the City of Hayward's adopted *Urban Limit Line*, and within 1.6 miles of Fire Station No. 5. Extension of residential use to 0.1 mile beyond the 1.5 mile service area of Station No. 5 would require Hayward City Council approval, as provided by the Walpert Ridge Specific Plan. The Fire Department could respond to calls for service from the project within five minutes from Station No. 5, which provides a five-minute response to calls from within the *Urban Limit Line* boundary (see Figure 15 in section IV.A, Land Use and Open Space). The project would increase the demand for service from Fire Station No. 5, however.

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993, pages 44, 46, and 51.

³City of Hayward, Walpert Ridge Specific Plan, July 25, 1995.

Mitigation PS-1: In addition to the measures identified in section IV.G (Public Health and Safety) of this SEIR, require the project applicant to fund (1) installation of a new Type III engine company at Station No. 5, to be staffed by the existing crew at this station, and (2) modifications to Station No. 5 to house the new Type III engine company. In addition, require the project to comply with the "additional measures for all development" identified in the 1991 EIR (see Table 27). These measures would reduce the impact to a *less-than-significant level*.

The requirements for installation of a Type III engine company and associated modifications to the station are identified in the Fire/Emergency Medical Services Mitigation Plan submitted by the project applicant.¹

Impact PS-2: Cumulative Demand for Fire Protection and Emergency Medical Services. The project would contribute to cumulative increases in demand for fire and emergency medical services in the Walpert Ridge area. This is a *potentially significant cumulative impact* (see Criterion a under "(1) Significance Criteria" above).

Development of a golf course and single-family housing (650 units) on the project site, combined with single-family residential development on the nearby Bailey and Carden properties, would produce an estimated total of 805 new housing units in the Walpert Ridge area. This new development would increase demands on fire protection and emergency medical services provided from Station No. 5.

Mitigation PS-2: During City review of proposed development plans in this area, verify that proposed urban development is located within 1.5 to 1.6 miles of Station No. 5, and require City of Hayward Fire Department review of the proposed plans to ensure that adequate emergency vehicle access is provided. This measure would reduce the impact to a *less-than-significant level*.

2. POLICE SERVICES

a. Setting

The City of Hayward Police Department provides police protection to the city of Hayward. The police station is located at 300 West Winton Avenue, approximately 6.5 miles from the project

¹Hunt Research Corporation, Fire/Emergency Medical Services Mitigation Plan for the Blue Rock Country Club Project, City of Hayward, May 21, 1997, page 12.

site. In 1994, the Police Department's staff consisted of 161 sworn officers, 101 civilian staff people, and 25 part-time employees. The Department currently maintains a ratio of 1.32 sworn officers per 1,000 population, with a goal of providing 1.5 officers per 1,000 population. Current normal staffing provides for seven patrol officers per beat on a 24-hour basis. At certain times of day, eight or nine officers are assigned to each beat. The Department also maintains mutual aid agreements with police departments in neighboring cities, and with the Alameda County Sheriff's Department and California Highway Patrol.¹

The Police Department maintains response time goals of three minutes for Priority 1 (emergency) calls and 10 minutes for Priority 2 calls (non-life-threatening services). The Department does not maintain response time goals for the remaining three types of calls: Priority 3 (injuries), Priority 4 (animal control), and Priority 5 (calls that can be handled over the telephone).²

The project site is located within Sector One, Beat A. This beat is patrolled by one officer per shift.³

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 28 summarizes police service impacts and mitigation measures identified in the 1991 EIR.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on police services if it would:

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including police services;⁴ or

¹City of Hayward, Stony Brook Place Residential Development Final EIR, November 1995, pages 210-211; and Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991), page 112.

²Ibid.

³Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991), page 112.

⁴CEQA Guidelines, Appendix I, Items II.14 and II.16.

Table 28

1991 EIR POLICE SERVICE IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 housing units in the subarea within 1.5 miles of Fire Station No. 5 would require a minimum of one new police officer. Development of 900 housing units would require a minimum of two new police officers.

Mitigation Summary

For development of 700 housing units, add one new police officer to the Hayward Police Department staff. For development of 900 housing units, add two new police officers to the Hayward Police Department staff.

Require Hayward Police Department review of all development plans for conformance with "Crime Prevention Through Environmental Design" concepts, which encourage development of a self-policing, safe atmosphere through design features in buildings, landscaping, circulation, and recreational facilities.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- (b) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element*¹).

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact PS-3: Project-Related Demand for Police Services. The project would increase the demand for services provided by the City of Hayward Police Department, requiring the hiring of a minimum of one new police officer. This is a ***potentially significant impact*** (see Criterion a under "(1) Significance Criteria" above).

The 650 single-family housing units proposed by the project could be expected to produce a population of approximately 1,911 persons, based on the Association of Bay Area Governments estimate of 2.94 persons per household for the Hayward area in the year 2000.² Based on the Police Department's goal of providing 1.5 officers per 1,000 population, the estimated 1,911 project residents would generate a need for approximately 2.9 officers. The proposed golf course may also create additional demand for police services.

The project would be a gated community, with access controlled by a 24-hour security guard using an Opticom gate system.³ These aspects of the project would assist in reducing crime potential on the site.

Mitigation PS-3: Monitor the rate of additional police calls per year associated with the project area and the adequacy of response times. As warranted by the monitoring data, provide additional officers and facilities (funded through the City's general fund), and establish a new police beat if necessary. Require Police Department review and approval of final project plans. These measures would reduce the impact to a ***less-than-significant level***.

The Police Department would review the project plans to ensure that the plans:

¹City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

²Association of Bay Area Governments, Projections 96, page 122.

³Lise Hinman, Hayward 1900, and Lori Wider, Sheppard, Mullin, Richter & Hampton; personal communication, July 25, 1997.

- (a) Meet the requirements of the *City of Hayward Building Security Standards Ordinance* (Ordinance No. 90-26, adopted as Chapter 41 of the City of Hayward Building Code);
 - (b) Minimize situations where developed open space (i.e., parks) abuts side and rear yards of dwelling units (to the extent that this does not conflict with fire protection and management goals);
 - (c) Provide for adequate resident and street parking; and
 - (d) Provide for adequate exterior illumination, consistent with building design and streetscape guidelines contained in the Walpert Ridge Specific Plan and City of Hayward Design Guidelines.
-

Impact PS-4: Cumulative Demand for Police Services. The project would contribute to cumulative increases in demand for police services in the Walpert Ridge area. This is a ***potentially significant cumulative impact*** (see Criterion a under "(1) Significance Criteria" above).

Development of a golf course and single-family housing (650 units) on the project site, combined with single-family residential development on the nearby Bailey and Carden properties, would produce an estimated total of 805 new housing units in the Walpert Ridge area. This new development would increase demands on police services.

Mitigation PS-4: Require future applicants for development in the Walpert Ridge area to comply with *Mitigation PS-3* above. This measure would reduce the impact to a ***less-than-significant level***.

3. SCHOOLS

a. Setting

(1) School Facilities, Enrollment, and Capacity. The project site is located within the jurisdiction of both the Hayward Unified School District (HUSD) and the Castro Valley Unified School District (CVUSD). Service by CVUSD would be impractical, however, because of the long distance between the project site and the nearest school. Policy IV.C (page 47) of the Walpert Ridge Specific Plan states that all residential development shall be served by HUSD and that residential development shall be precluded in areas not yet served by HUSD.

The HUSD operates a total of 31 schools, consisting of 23 elementary schools (Kindergarten through Grade 6), 5 intermediate schools (Grades 7-8), and 3 high schools (Grades 9-12).¹ In addition, the HUSD operates one children's center, two adult education centers, and one English language center.² Overall enrollment in HUSD schools is projected to increase over the next eight years, due to anticipated new housing development and birth rate increases.³

The following HUSD schools currently serve the project area:

- **Highland Elementary School**, located approximately 2.5 miles west of the project site at 2021 Highland Boulevard. This school serves students in Kindergarten through Grade 6. Current (October 1996) enrollment is 459 students, and projected (October 1997) enrollment is 482 students. The school is operating over-capacity and is not able to accept new students.⁴
- **Bret Harte Middle School**, located approximately 3.5 miles northwest of the project site at 1047 E Street. This school serves students in Grades 7 and 8. Current (October 1996) enrollment is 631 students, and projected (October 1997) enrollment is 598 students. An HUSD representative has indicated that this school currently does not have the capacity to accept new students.⁵ However, in a subsequent meeting with City of Hayward staff, HUSD representatives indicated that the school could accept students from development on the Blue Rock Country Club project site.⁶
- **Hayward High School**, located approximately three miles northwest of the project site at 1633 East Avenue. This school serves students in Grades 9 through 12. Current (October 1996) enrollment is 1,700 students, and projected (October 1997) enrollment is 1,794 students. An HUSD representative has indicated that this school currently does not have the capacity to accept new students.⁷ However, in a subsequent meeting with

¹Hayward Unified School District, Facilities Master Plan, prepared by Land Planning Consultants, Inc., September 20, 1993, page 11.

²Larry Lepore, Facilities Supervisor, Hayward Unified School District; personal communication, June 12, 1997.

³Lapkoff & Gobalet Demographic Research, Inc., Demographic Analysis and Enrollment Forecasts for the Hayward Unified School District (draft), June 15, 1993 (revised September 1, 1993), page 94.

⁴Lepore.

⁵Lepore.

⁶Dyana Anderly, Development Review Services Administrator, City of Hayward Department of Community and Economic Development; personal communication, September 3, 1997.

⁷Lepore.

City of Hayward staff, HUSD representatives indicated that the school could accept students from development on the Blue Rock Country Club project site.¹

The School Board has directed the HUSD to reconfigure its schools so that elementary schools would serve Kindergarten through Grade 5 and middle schools would serve Grades 6 through 8. This would increase enrollment at Bret Harte Middle School and other HUSD middle schools, and may require school attendance boundary changes if certain schools cannot accommodate the increased enrollment. Bret Harte Middle School has limited capacity for expansion, since the school is built on a terraced site that may not provide sufficient room for additional classrooms.²

(2) Student Yield Factors. In estimating the number of new students that would be generated by new single-family residential development, the HUSD uses student yield factors shown in Table 29 below.

(3) School Impact Fees. State law enables school districts to levy school impact fees on new development to offset the costs of providing school services. The maximum fees a school district can levy are currently set at \$1.84 per square foot of new residential construction and \$0.30 per square foot of new commercial construction. In the opinion of a HUSD representative, this fee is not adequate to cover all costs associated with serving new residential development.³ This is a common problem among school districts in California; one recent report has stated that "school districts generally argue that full mitigation requires \$6-7 per square foot on residential development, though the figure varies from region to region."⁴

(4) Requirements for New School Sites. The standard size for new HUSD school sites is ten acres. Smaller school site acreages may be acceptable in the case of joint school/park sites, provided that the HUSD is able to establish an acceptable arrangement with HARD for daytime use of joint facilities, such as play fields.⁵

¹Dyana Anderly, Development Review Services Administrator, City of Hayward Department of Community and Economic Development; personal communication, September 3, 1997.

²Lepore.

³Lepore.

⁴"School Districts Push For Higher Fees From Localities, Developers," in California Planning & Development Report, Vol. 8, No. 5, May 1993, page 9.

⁵Letter from Marlin Foxworth, Superintendent of Schools, Hayward Unified School District, to City of Hayward, re. "Blue Rock Country Club," June 9, 1997; and Arnie Glassberg, Deputy Superintendent, personal communication, June 24, 1997.

Table 29

STUDENT YIELD FACTORS FOR NEW DEVELOPMENT

<u>Grade Level</u>	<u>Estimated Number of Students</u>		<u>Per Condo.</u>	<u>Per Apt.</u>
	<u>Per SF Unit</u>	<u>Per Townhouse</u>		
Kindergarten-Grade 3	0.12	0.19	0.05	0.14
Grades 4-6	0.10	0.14	0.02	0.07
Grades 7-8	0.06	0.09	0.01	0.06
Grades 9-12	0.09	0.21	0.03	0.09

SOURCE: Hayward Unified School District

SF = single-family
Condo. = condominium
Apt. = apartment

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 30 summarizes school service impacts and mitigation measures identified in the 1991 EIR.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on schools if it would:

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including schools;¹
- (b) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element* ²); or
- (c) Create burdensome schedules for schools, or require additional school busing or overcrowding of classrooms or other school facilities.

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact PS-5: Project-Related Impacts on HUSD Capacity. The proposed onsite elementary school would provide adequate capacity to accommodate the estimated 143 elementary school students generated by the project. The existing Bret Harte Middle School and Hayward High School may not have sufficient capacity to accommodate the estimated 39 middle school students and 59 high school students from the project, however. The project would therefore have a ***potentially significant impact*** on HUSD schools (see Criteria a through c under "1. Significance Criteria" above).

Table 31 indicates the estimated project student population, based on the student yield factors used by the HUSD (see "Setting" subsection above). As shown in the table, the project would generate approximately 143 elementary school students, 39 middle school students, and 59 high school students. As indicated in the 1991 EIR (see Table 30 above), project-related elementary and middle school enrollment would exceed the capacities of Highland Elementary School and Bret Harte Middle School. In addition, Hayward High School would no longer

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

Table 30

1991 EIR SCHOOL SERVICE IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 housing units in the subarea within 1.5 miles of Fire Station No. 5 would generate 350 students (175 elementary school students, 70 middle school students, and 105 high school students). This enrollment would cause Highland Elementary School to exceed its capacity by 106 students and Bret Harte Middle School to exceed its capacity by seven students; Hayward High School would remain under capacity.

Development of 900 housing units would generate 450 students (225 elementary school students, 90 middle school students, and 135 high school students). This enrollment would cause Highland Elementary School to exceed its capacity by 156 students (requiring either expansion of the school or redirection of some students to other schools), and Bret Harte Middle School to exceed its capacity by 27 students (requiring expansion of the school). Hayward High School would remain under capacity.

Mitigation Summary

Require either expansion of Highland Elementary School and Bret Harte Middle School or redirection of some students to other elementary and middle schools.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

Table 31
STUDENT YIELD FROM PROPOSED PROJECT

<u>Grade Level</u>	<u>Students Per Unit</u>	<u>Proposed Number of Units</u>	<u>Total Students</u>
Kindergarten-Grade 3	0.12	650	78
Grades 4-6	0.10	650	65
Grades 7-8	0.06	650	39
Grades 9-12	0.09	650	59
			TOTAL: 241

SOURCE: Hayward Unified School District; Wagstaff and Associates.

have capacity to accommodate project-related high school enrollment, as indicated in the 1991 EIR.

The current project plans include an approximately 11.3-acre elementary school/park site located on the south side of Fairview Avenue/Hayward Boulevard in the northwest corner of the proposed residential development area, immediately outside the project entry gate. The applicant is currently negotiating with the HUSD to determine whether the applicant would dedicate the school site (6.3 acres) to the HUSD, pay school impact fees to the HUSD, or provide other school mitigation acceptable to the HUSD. If the elementary school is constructed on the site, the project, in the first phase of development, would include construction of an approximately 54,794-square-foot elementary school that would include (1) classrooms for 350 students, and (2) "core" facilities (e.g., library, multipurpose room, restrooms, offices) of adequate size to accommodate the initial 350-student school enrollment.¹ The school, which would serve elementary school students from the project, would be "modular," allowing the HUSD to construct additional facilities on the site over time (see section III, Project Description).

The project-proposed 6.3-acre school site would not comply with the California Department of Education recommendation that new school sites contain a minimum of ten acres. The 6.3-acre site, if it does not include sports field areas, may be acceptable to HUSD, however, if adequate arrangements can be made with HARD for joint use of recreational facilities in the adjoining park site.²

Mitigation PS-5: Require the project applicant to comply with standard HUSD school impact fee requirements. This measure would reduce the project's impact on HUSD schools, but not to a less-than-significant level. Alternatively, the applicant may voluntarily enter into a development agreement with the City of Hayward that, as determined by the Hayward City Council in its approval of the City/applicant development agreement, provides for (1) land dedication and construction of a 350-student elementary school on the project site, as proposed by the project; (2) payment of impact fees at a rate of \$2.84 per square foot of residential development; or (3) other school mitigation acceptable to the HUSD and included in the City/applicant development agreement. Implementation of one of these measures would reduce the impact to a ***less-than-significant level***.

Government Code Section 65996 limits the types of mitigation that can be imposed to ensure adequate school facilities. In the case of this project, payment of standard school impact fees (\$1.84 per square foot of residential development) appears to be the only feasible measure

¹Annie Glassberg, Deputy Superintendent, Hayward Unified School District; personal communication, June 24, 1997.

²Glassberg.

among the forms of mitigation allowed by this Government Code section. Accordingly, the City may require the applicant to comply with HUSD school impact fee requirements. The exact fee would be calculated at the time that habitable floor area for the project housing units is known. This measure would help offset the capacity problems at HUSD schools, but would most likely not mitigate the impact to an insignificant level because, as noted in the "Setting" subsection above, the maximum state-permitted school impact fees typically do not cover all capital costs incurred by a school district in serving new residential development.

Implementation of one of the following alternative approaches would mitigate the project's schools impact to an insignificant level:

- *Onsite Elementary School.* The applicant could provide for land dedication and construction of a 350-student elementary school on the project site, as currently proposed by the project. An applicant-City development agreement could specify details regarding the proposed elementary school design (e.g., construction of a 350-student "core" school with a site plan designed for an ultimate enrollment of 650 students, compliance with HUSD standards for off-street bus and vehicle loading and parking areas¹, joint HUSD and HARD use of the school/park site).
- *Additional Impact Fees for Legislative Actions.* The City and the HUSD could seek additional impact fees from the project, since it involves a "legislative action" (i.e., general plan amendment and zone change) and therefore is not subject to the school impact fee limitation, according to the *Mira/Hart/Murrieta* line of court cases.² Based on these cases, other school districts have succeeded in levying additional fees for legislative actions. The decisions in these cases have indicated that general plan policies requiring adequate school facilities should be in place to provide the basis of the additional fees. The City's current General Plan *Growth Management Element* includes the following such policy:

(Provisional Standard F1) Proposals to legislate new residential potential should not be approved until adequate capacity is available as determined by the school district

¹Letter from Dyana Anderly, AICP, Development Review Services Administrator, City of Hayward, to Joanna Callenbach, et al., re. "Walpert Ridge Planned Development Application No. 94-98, Blue Rock Country Club," June 12, 1997.

²In *Mira Development Corp. v. City of San Diego* (205 Cal.App.3d 1201), an appellate court ruled that the School Facilities Act's pre-emptions applied only to quasi-judicial decisions, such as tentative map approvals under the Subdivision Map Act, and not to legislative decisions, such as general plan amendments and most zone changes. *William S. Hart Union High School District v. Regional Planning Commission* (225 Cal.App.3d 1612) reaffirmed the *Mira* case. *Murrieta Valley Unified School District v. County of Riverside* (228 Cal.App.3d 1212) clarified the earlier rulings and said the law did not prohibit land use planning changes or mitigation measures to lessen the impact of new development on schools. (From "Special Report: School Mitigation," California Planning & Development Report, Premiere Edition--1995, page 2.)

or guaranteed in an agreement between the developer and the school district for full mitigation. Each local school should be able to accommodate the children from proposed development without necessitating burdensome schedules for families or adding to expensive school busing. Classrooms and other facilities including the multi-purpose room, library, labs, or sports and recreation areas must not be overcrowded.

City staff has indicated that an impact fee of \$2.84 per square foot of residential development may be considered as a development agreement provision to mitigate the project's impact on HUSD schools. (This is the school impact fee amount that the HUSD indicated was adequate to mitigate impacts of a currently proposed development plan for the adjoining Bailey property.)¹

- **Voluntary Agreement.** As an alternative to the elementary school construction or impact fee requirements described above, other school mitigation requirements acceptable to the HUSD could be incorporated into an applicant-City development agreement.

Impact PS-6: Cumulative Impacts on HUSD Capacity. Increases in enrollment at HUSD schools due to cumulative residential development in the Walpert Ridge area and citywide may create substantial capacity problems at all grade levels, representing a **potentially significant cumulative impact** (see Criteria a through c under "1. Significance Criteria" above).

A total of 805 single-family housing units (including the 650 units proposed by the project) have been approved, are pending approval, or may ultimately be approved in the project site vicinity.² Based on HUSD student generation factors (see "Setting" subsection above), these units would generate a total of 178 elementary school students, 48 middle school students, and 72 high school students. Citywide, City staff estimates that up to 8,976 additional housing units (including the 805 units in the Walpert Ridge area) could be constructed, of which approximately 85 percent (7,630 units) would be single-family and the remaining 15 percent (1,346 units) would be multi-family.³ Based on HUSD student yield factors listed in Table 31

¹Dyana Anderly, Development Review Services Administrator, personal communications, August 13, 1997, and September 3, 1997.

²Memorandum from Hanson Hom, City of Hayward, to John Wagstaff et al., re. "Potential Units on Walpert Ridge," May 7, 1997.

³Fax transmittal from Matt Tomas, City of Hayward, to Natalie Macris, Wagstaff and Associates, re. City of Hayward Housing Development Potential: 1995," June 12, 1997; and personal communication, June 13, 1997 and August 12, 1997. These estimates account for the possibility of construction of higher-density single-family housing in areas designated for multi-family residential use.

above, and assuming that the 1,346 multi-family units were townhouses (the "worst-case" for estimating impacts on schools), development of 8,976 additional housing units would generate approximately 2,122 elementary school students, 579 middle school students, and 969 high school students. This additional development would produce a student population that would substantially increase enrollment demands at HUSD schools.

Mitigation PS-6: The voluntary school mitigation provisions of the applicant/City of Hayward development agreement discussed under *Mitigation PS-5* above would reduce the project's contribution to this cumulative impact to a ***less-than-significant level***. In addition, require future applicants to comply with HUSD school impact fee requirements to finance school improvements. Alternatively, applicants may voluntarily enter into agreements with the HUSD that provide for school construction and/or payment of impact fees negotiated with the HUSD. These measures would reduce the impact to a ***less-than-significant level***.

4. WATER SERVICES

a. Setting

The project site is located within the City of Hayward's water service area. The San Francisco Water Department (SFWD) supplies the City with water from their Hetch Hetchy system. The distribution system is divided into five primary pressure zones (250, 500, 750, 1000, 1285), each of which is served by one or more storage tanks with a total system capacity of 24 million gallons. Water within zone 250 is distributed without the use of pump stations while the upper pressure zones are served by a series of pump stations forming what is called the Highland Chain. The Highland Chain is composed of the Highland Pump Stations 250, 500, 750, and 1000. Because the pump stations are in series they must be capable of supplying the total water needs of the upper zones.

A portion of the project site falls within the boundaries of the existing 1285 pressure zone. This area is currently served by the existing 1285 storage tank (capacity 1.8 million gallons) which is supplied by the 1000 Highland Chain pump station via a 12-inch water line. The only other existing water facility in the area is a 12-inch water line at the intersection of Fairview Avenue and Woodstock Road, which is at the western edge of the proposed project boundary.

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 32 summarizes water service impacts and mitigation measures identified in the 1991 EIR.

Table 32

1991 EIR WATER SERVICE IMPACT AND MITIGATION FINDINGS

Impact Summary

A 700-unit housing development in the subarea within 1.5 miles of Fire Station No. 5 would require 555,795 gpd of water, and associated infrastructure improvements, including two pumps at each of the 250-, 500-, and 750-foot elevations, and three pumps at each of the 1,00-, 1,285, and 1,430-foot elevations. A 900-unit housing development would require 711,150 gpd of water, and associated infrastructure improvements.

Mitigation Summary

Require a qualified engineer to review project plans. Review plans to ensure that adequate water pressure exists, and water for firefighting is available. Require water conservation measures in the design of all units. Require development to comply with the City of Hayward's water rationing program.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on water services if it would:

- (a) Result in a need for new systems, or substantial alterations to services or utilities, or other governmental services;¹ or
- (b) Result in a public service condition which is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan, (including the *Growth Management Element*),² and the Hayward Area Recreation and Park District (HARD) Master Plan.

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to supplement those identified in the 1991 EIR.*

Project Impacts on Existing Water Supply. The proposed project would generate an average daily water demand of approximately 0.68 million gallons per day (mgd), with peak daily demands of approximately 1.83 mgd. The City of Hayward's water supply would be adequate to serve this demand. The project's effect on existing water supply would therefore represent a ***less-than-significant impact***.

The project proposes an 18-hole golf course with associated clubhouse and practice range, 650 single-family homes, an elementary school, neighborhood parks, and a tennis and swim club, all of which would require water service that is proposed to be supplied from the City of Hayward's municipal system.

The estimated average daily water needs for the project are approximately 0.68 mgd. Based on a peaking factor of 2.0, it is estimated that the maximum daily project demand would not exceed 1.50 mgd. The City of Hayward recently retained an evaluation of the impacts of the proposed Blue Rock Country Club project on the City's water distribution and transmission system (see "(c) Water System Evaluation" below).³ The existing 1285 Zone has adequate storage capacity and no additional capacity is required to serve the small portion of the project that is served by this zone. A new water tank, with associated piping and pumps, will serve the rest of the project site. The City of Hayward has the capability and willingness to serve the project site.

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

³Montgomery Watson, Analysis of Water Facilities for the Proposed Walpert Ridge Development Including Blue Rock Country Club Project, June 30, 1997.

Table 33 shows estimated water demand by land use. Unit flow rates for the residential units, school, parks, and common landscaped area are based on the 1995 Walpert Ridge Specific Plan, which are slightly greater than the unit flow rates in the City's Master Plan. Unit flow rates for the tennis club and golf course clubhouse are from the 1988, JMM Walpert Ridge Utilities System Evaluation, and the golf course irrigation requirement is taken from work done by Carlson, Barbee & Gibson, Inc. Peaking factors for maximum day and peak hour were 2.0 and 3.0, respectively, for all flows, with the exception of the golf course irrigation which was that determined in work done by Russell D. Mitchell and Associates, Inc.

Mitigation of Project Impacts on Existing Water Supply. No significant impact has been identified; no mitigation is required.

Impact PS-7: Project Water Transmission and Distribution Line Needs. The development of the project would require additional water transmission and distribution facilities to serve the project. This is a *potentially significant impact* (see Criterion (a) under "(1) Significance Criteria" above).

(a) Pressure Zones. The project would be developed within two pressure zones, the existing 1285 Zone and the new 1520 Zone. The existing 1285 Zone would serve ten units, the elementary school, and the five-acre neighborhood park, and the new 1520 Zone would serve 640 units, 6.5 acres of private parks, golf course, clubhouse, and tennis/swim center. Both pressure zones would serve common area landscaping.

The 1285 Zone would be served by the existing storage tank in that zone (capacity 1.8 million gallons) with the new zone being served by two storage tanks (total capacity 2.3 million gallons) to be constructed with its overflow at an elevation of 1,520 feet. The tanks have been sized so as to provide operational storage, emergency storage, and fire storage for the proposed project. They do not include storage for golf course irrigation.

(b) Water System Evaluation. In 1995, the City of Hayward authorized preparation of a Water Distribution System Master Plan (Master Plan) to develop projected future water demands and identify capital improvement projects and other operational recommendations to serve the future demand from development of the City to build-out and to improve water system operations. The Master Plan assumed development on Walpert Ridge consisting of 700 homes on 388 acres plus a small park. Approximately 200 of those homes were assumed to be served by the existing 1285 Zone. The remainder of the demand would be served by a new higher pressure zone.

The Blue Rock Country Club project differs from the assumed development used in the Master Plan. The allocated maximum per day demand for Walpert Ridge in the Master Plan was 0.56 mgd, and the maximum per day demand using the current project-specific water demand

Table 33
ESTIMATED PROJECT WATER DEMAND

<u>Land Use</u>	<u>Units</u>	<u>No. Items</u>	<u>Unit Flow Rate</u>	<u>Projected Demand</u>			
				<u>Average Day (gpd)</u>	<u>Maximum Day (gpd)</u>	<u>Peak Hour Rate (gpd)</u>	<u>(gpm)</u>
Single Family Dwellings	Homes	650	400	260,000	520,000	780,000	542
School	Acres	6.3	1,339	8,436	16,872	25,308	18
Parks	Acres	11.5	1,785	20,528	41,055	61,584	43
Tennis/Swim Club	Acres	7	2,230	15,610	31,220	46,830	33
Golf Course Clubhouse	Acres	4	2,230	8,920	17,840	26,760	19
Golf Course Irrigation	Acres	128	1,785	228,480	912,000	1,824,000 ¹	1,267 ¹
Common Area Landscaping	Acres	79.9	1,785	142,622	285,243	427,865	298
Total				684,596	1,824,230	--²	--²

SOURCE: Carlson, Barbee & Gibson, June 11, 1997 and update memo dated June 10, 1997.

gpd = gallons per day
gpm = gallons per minute

¹ Based on an assumed uniform 12-hour irrigation period for maximum day water demand.

² No total provided, since peak hourly water demands do not necessarily coincide.

criteria proposed by the developer ranges from 1.02 mgd without the golf course to 1.95 mgd. The increase is due primarily to the incorporation of a golf course in the development.

Due to these changes in water demand, the City retained Montgomery Watson to complete an evaluation of the impacts of the proposed Blue Rock Country Club project on the City of Hayward water distribution and transmission system, which is presented in a letter report, dated June 30, 1997. An analysis of the pumping and storage needs, and a hydraulic evaluation of the Highland Chain pumping system were conducted with alternative development scenarios for the Blue Rock Country Club project. Specific projects required to serve the increased water demands for the project as well as projects identified in the 1995 Master Plan that are affected by the project are identified with their associated project costs in the Montgomery Watson report.

The key findings and conclusions of the Montgomery Watson report as pertains to environmental review of the water supply aspects of the proposed project are as follows:

Storage:

- The existing 1285 Zone has adequate storage capacity, and no additional capacity is required to serve the project.
- The new 1520 Zone must be provided with approximately 2.3 million gallons of storage capacity, which the City of Hayward desires to have supplied in two tanks for maintenance purposes.

Pumping:

- The largest impact of the project on Highland chain pumping operations is caused by the golf course irrigation demand.
- The City's time-of-use operation (since completion of the Master Plan) at the Highland Chain requires that the pump stations deliver the maximum day demand over an 18-hour non-electrical peak time period. The City currently benefits from time-of-use electrical rates with the current pumping and storage configuration. The stations, as currently sized, can provide enough operational flexibility to allow time-of-use operation. The increased demand generated by the Walpert Ridge Developments, primarily due to the Blue Rock Country Club golf course irrigation, will drastically curtail the current time-of-use operation.
- It is assumed that the total volume of the lagoons depleted by the maximum daily demand may be replenished over an 18-hour period.
- The pumping capacity at the Highland Chain will be sized to pump at a greater rate for a shorter period of time (i.e., 18 hours rather than 24 hours), consistent with the City's current operational SCADA controls.

- In order to maintain the same level of operational flexibility and time-of-day pumping as currently exists in the Highland chain, pumping capacity up to approximately 1,800 gpm must be provided at each of the Highland chain pumping stations.
- A pump station with a capacity of approximately 1,650 gpm is required to supply the new 1520 Zone.
- Additional pumping capacity required at the Highland 250 and 500 pump stations can be accommodated by adding one pump at each station. An alternative to adding another pump is to replace the three existing pumps with three pumps totalling the required pumping capacity. Piping modifications and electrical facility upgrades would be required for both options.
- At the 750 and 1000 Pump Stations, provision of the additional pumping capacity is recommended to be achieved by replacing the pumps and motors with larger units. The electrical panels, station piping, standby generators and other station components will require upsizing to accommodate the larger pumps/motors.
- The new pump station located at the 1285 tanks to serve the 1520 Zone will be housed in a concrete block building. Three pumps will be provided: two duty pumps and one standby. The total firm capacity of approximately 1,600 gpm will be provided in the two duty pumps. An emergency generator will be constructed at the station.

Hydraulic Evaluation:

- The significant pumping in the Highland chain will stress the operational storage capacity at the 250 reservoirs that feed the 250 pump station. The recommendation to mitigate the increased pumping is to hydraulically link the larger South Walpert Reservoir with an 18-inch pipeline to the 250 reservoir. (Note: Per the City's Master Plan, this recommended improvement is needed to rectify existing inadequacies in the system.) This improvement in tandem with an additional pump station at South Walpert will provide the Highland Chain with the reliability and full redundancy to provide water to the project.
- A hydraulic model run under maximum day, plus fire flow conditions in the 1285 and 1520 Zones, identified that a 14-inch pipeline is adequate to fill the reservoir which connect the new 1285 pump station (to feed the new 1520 Zone) and the 1520 Zone tanks. A fire flow analysis conducted at the golf clubhouse in the 1520 Zone indicates the proposed 14-inch pipeline connecting the new pump station to the new 1520 tanks will provide the 20 psi residual pressure at the pad elevation at the clubhouse. However, the sprinkler system pressure requirements should be verified against the 20 psi residual as development plans become finalized.

- The new elementary school (in the 1285 Zone) will be connected directly to the 12-inch main in Fairview Avenue to provide 20 psi residual pressure at the school.¹

(c) Project Water Transmission & Distribution Line Needs. A small portion of the project can be served by pressure zone 1285 which is supplied by the 1000 Highland Champ pump station via a 12-inch water line. Another 12-inch water line exists at the western edge of the project boundary. As previously discussed, the Montgomery Watson evaluation of the impacts of the proposed project on the City's water distribution and transmission system has identified pumping and pipeline improvements in order to accommodate the project's demands.

In addition, the applicant has suggested the incorporation of lakes in the golf course design plan to meet potential shortfalls of water demand during peak summer months; this would reduce the pumping requirements demanded by the project. The water distribution transmission system of the project will be further addressed by the applicant once the final golf course plans are developed.

Mitigation PS-7: Implement improvements identified in the Analysis of Water Facilities, for the Walpert Ridge Development Including Proposed Blue Rock Country Club Project (Montgomery Watson, June 30, 1997) or any improvements deemed necessary by the City to maintain the City's required level of service. Determination of actual improvements necessitated by the final project design to be based upon a comprehensive study/plan developed by a qualified consultant and approved by the City. These measures would reduce any adverse impacts on the City's water distribution and transmission system to a ***less-than-significant level***.

Impact PS-8: Project Golf Course and Park Irrigation Needs. Although the City of Hayward's water supply would be adequate, the use of potable water supplies for irrigation of managed golf course and park turf areas may not be acceptable, especially during extended drought periods. This is a ***potentially significant impact*** (see criterion (b) under "(1) Significance Criteria" above).

(a) Project Irrigation Needs. It has been estimated that managed turf areas of the project golf course would require between 31 and 42 inches of irrigation water annually,² which is proposed to be supplied by the City of Hayward's water system. The irrigation water demand

¹Carlson, Barbee & Gibson, Response to Comments on Blue Rock Country Club ADEIR, July 2, 1997.

²Balance Hydrologics, letter dated March 21, 1997.

is a function of the evapotranspiration requirements of turf grass.¹ Multiplied by a total proposed turf area of 128.5 acres,² this results in a total annual water requirement of between 105 and 146 million gallons. Additional water would be required for irrigation of proposed parks and for the playground area of the proposed elementary school.

According to the Bryan Grunwald Associates report,³ to conserve water, the golf course would minimize maintained areas and utilize a state-of-the-art irrigation system. Three systems would employ valve-in-head technology with each sprinkler wired to satellite field controllers. These satellite controllers would be linked to a central computer located in the maintenance center, which would provide overall control to the system. The computer would enable the golf course superintendent to analyze climate data and water use information, matching the application of water to the needs of the turf grass. With a valve-in-head irrigation system it would also be possible to diminish the amount of irrigated turf during periods of low water availability.

Three lakes are to be constructed within the golf course, one of which would be used to meet storage requirements for golf course irrigation. The lake proposed for irrigation water storage would contain 24 acre-feet⁴ which, at a maximum daily demand of 912,000 gallons per day, is capable of providing eight days of water supply assuming all water needs are provided by the lake. Typical operation of the lake, however, would be to draw down the lake elevation only to between 0 and 3.0 feet, and replenish the lake during low irrigation demand times.⁵

(b) General Plan Policies. Use of potable water for irrigation purposes is generally discouraged by the following City of Hayward General Plan Growth Management Element strategies:

- *Consider water limitations and current water distribution in future development and planning; require analysis of water usage impacts in reports analyzing proposed development.* (Strategy 1, page 41)

¹Transpiration is the loss of water due to plant uptake. Evaporation is the loss of water to the atmosphere. When computing water loss from a vegetated surface, it is usually impossible to separate transpiration and evaporation from the soil surface. The two processes are usually considered together under the title evapotranspiration. Evapotranspiration requirements of the turf grass are adjusted correspondingly with monthly rainfall values in order to calculate the consumptive water demand of the irrigated turf. Refer to Table H-7 for the average and maximum day projected consumptive water demand of the golf course.

²Bryan Grunwald Associates, 1997.

³Bryan Grunwald Associates, 1997.

⁴Bryan Grunwald Associates, 1997.

⁵Bryan Grunwald Associates, 1997.

- *Conserve water by utilizing drought-tolerant landscaping in future development, and in city landscaping as well as through educational efforts and the use of water saving devices. (Strategy 2, page 41)*
- *Expand utilization of reclaimed water for non-potable uses. (Strategy 3, page 41)*

Mitigation PS-8: Require the applicant to redesign the proposed golf course to reduce irrigation water demand, and/or design the golf course irrigation system to reclaim water for reuse. Investigate and develop, as feasible, groundwater resources as a supplemental source of water for irrigation of managed golf course and park turf areas. These measures would reduce the impact to a *less-than-significant level*.

The potential feasibility of groundwater, reclaimed water use, and capture and reuse of winter runoff (stormwater) was investigated by Balance Hydrologics, Inc. and summarized in a letter dated March 21, 1997.

(a) Groundwater. In this report, Balance Hydrologics indicated that the use of shallow groundwater is not feasible. This is based on information gathered from individuals with homes in the area that have shallow groundwater wells. It was reported that during the drought occurring in the late 1980s these residential wells went dry and outside water had to be trucked in. Because of the failure of these wells to supply the needs of individual residences, it was suggested that the shallow groundwater supply would also not be capable of supplying the yearly irrigation requirements in excess of 105 million gallons. However, water from low yielding wells could be pumped and stored in on-site ponds to reduce the impact to potable water sources.

Deeper sources of groundwater were also considered for their ability to meet the irrigation demand. It was estimated that on average three to five gallons per minute could be produced per well resulting in daily flows of 4,300 to 7,200 gallons per day. This yield is based upon wells in similar settings; site-specific investigations or testing was not conducted. Because daily demand was estimated to be as much as 500,000 to 800,000 gallons per day (and has subsequently been revised upwards to 600,000 to 900,000), it was determined that deep well water sources would not be adequate to satisfy irrigation needs. In addition, the report suggested that, due to the marine sedimentary origins of the formation, the water would be too saline for use in irrigating turf grass.

Although the Balance Hydrologics study concluded that groundwater supplies would likely not satisfy the overall golf course irrigation needs, the study did not consider that the development of groundwater could possibly provide a viable supplement to reduce the dependence on potable supplies. Water wells producing as little as three to five gallons per minute (gpm) may still represent an economical source of water (as compared with the purchase of potable water), and would be preferred environmentally. The Balance Hydrologics study also rejects the use of deep groundwater due to the potential for high mineral content; however, as a

supplemental source, such water would be blended (i.e., diluted) with the potable water, greatly reducing any effects of the high mineral concentration.

Accordingly, the applicant should undertake an onsite deep groundwater study. This would entail water well exploration for supplemental irrigation water to aid in satisfying the project irrigation demands. Utilizing onsite groundwater resources for irrigation water would reduce the project's dependence on potable supplies.

(b) Storm Water. The analysis showed that only in wet years would the potential volume of captured runoff be sufficient to meet the projected annual golf course irrigation demand, and then only if runoff was captured from the undeveloped sub-watersheds draining to Palomares Creek or Dry Creek. Without contributions from these sub-watersheds, or in normal to dry years, runoff would need to be supplemented from another water supply source. Thus, to guarantee that sufficient water would be available each year to maintain the golf course, the developer would have to purchase and install a second distribution system of piping and pumps. The cost of the two-system design and the environmental impacts associated with constructing larger detention basins, installing pipelines, and diverting runoff from local stream, including the expense of mitigation, would reduce the economic feasibility of this supply alternative.

(c) Reclaimed Water. The only sources of reclaimed water are the City treatment plant and the Livermore-Amador Valley Water Agency (LAVWMA) pipeline which brings treated wastewater from the valley to the East Bay Dischargers Authority facilities at the San Leandro Marina. The cost of bringing water from either the plant or the LAVWMA pipeline to the golf course is likely prohibitive for this project.¹

5. SEWER SERVICES

a. Setting

(1) Wastewater Facilities in Project Area. The project site is located within the service boundaries for wastewater collection and treatment provided by the City of Hayward. Hayward's service area includes approximately 300 miles of sewer lines, seven lift stations (two major and five minor) and 2-1/2 miles of force mains. Collection system improvements are ongoing and include major capacity improvements to the Valle Vista Lift Station which is to have an ultimate firm capacity of 14.6 million gallons per day.² Existing City sewer facilities near the project area include a 10-inch main that begins in Fairview Avenue just north

¹City of Hayward, Public Works Department, Response to Comments on Blue Rock Country Club Project SEIR (City staff comment letter), July 3, 1997.

²Alex Ameri, Deputy Director of Public Works for Utilities, City of Hayward Public Works Department; personal communication, June 1997.

of the intersection of Fairview Avenue and Hayward Boulevard. This 10-inch main runs westward along Barn Rock Drive until it intersects Hayward Boulevard after which it follows Hayward Boulevard to the west.¹

(2) Wastewater Treatment Plant. The City of Hayward's wastewater treatment plant consists of a trickling filter and fluidized bed reactor in series. The fluidized bed reactor is currently undergoing major repairs and is to be placed back into service in approximately one year.² As a result, treatment is being accomplished solely through the use of the plant's trickling filter. Following treatment to secondary effluent standards, the treated wastewater is disinfected and discharged to the East Bay Dischargers Authority (EBDA). EBDA operates a dechlorination facility located at the San Leandro Marina which receives treated wastewater from a total of six treatment plants including Hayward's plant. After dechlorination, EBDA discharges the treated wastewater to the San Francisco Bay via a deep water outfall.

The treatment plant has a dry weather capacity of 13.1 million gallons per day (mgd) and has received approval to increase its capacity to 16.5 mgd following hydraulic improvements to the plant's headworks. These improvements are to be completed by the fall of 1998.³ Oxidation ponds located on the plant site, but which are no longer in daily use, are utilized for temporary storage of wet weather flows that exceed the plant's dry weather treatment capacity or whenever it is deemed necessary for operational reasons. Peak wet weather flows, caused by infiltration and inflow into the collection system, typically range from 23 to 24 mgd.⁴

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 34 summarizes sewer service impacts and mitigation measures identified in the 1991 EIR.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on sewer services if it would:

¹Carlson, Barbee & Gibson, Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads & Grading for the Hayward 1900 Property, revised May 22, 1997.

²Ameri.

³Ameri.

⁴Ameri.

Table 34

1991 EIR SEWER SERVICE IMPACT AND MITIGATION FINDINGS

Impact Summary

A 700-unit housing development in the subarea within 1.5 miles of Fire Station No. 5 would generate 268,700 gpd of wastewater, with a peak dry weather flow of 698,600 (assuming a peaking factor of 2.6). With infiltration, 853,600 gpd would be generated (assuming an inflow allowance of 500 gpd per acre and 310 acres (155,000 gpd) for peak wet weather flow). This level of development would require lift stations and major interceptors.

A 900-unit housing development in the subarea within 1.5 miles of Fire Station No. 5 would generate 343,100 gpd of wastewater, with a peak dry weather flow of 892,000 (assuming a peaking factor of 2.6). With infiltration, 1,047,000 gpd would be generated (assuming an inflow allowance of 500 gpd per acre and 310 acres (155,000 gpd) for peak wet weather flow). This level of development would require lift stations and major interceptors.

Mitigation Summary

Require a comprehensive analysis of downstream impacts. If necessary, require developers to address additional sewer treatment capacity.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- (a) Result in a need for new systems, or substantial alterations to services or utilities, or other government services;¹
- (b) Extend a sewer trunk line with capacity to serve new development;² or
- (c) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element*).³

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Project Wastewater Flows. The project would generate approximately 174,530 gallons per day of wastewater flows for collection, treatment and disposal in the City of Hayward's sanitary sewer system. This is a ***less-than-significant impact***.

The proposed Blue Rock Country Club project includes an 18-hole golf course with associated clubhouse and practice range, 650 single-family homes, an elementary school, a neighborhood park, and a tennis and swim club, all of which would require the provision of municipal sewer service from the City of Hayward.

Table 35 shows estimated project wastewater generation by land use. As shown in the table, projected wastewater flows for the development are estimated to be 174,530 gallons per day (gpd). For the purposes of collection system design, a peaking factor of 3.0 was used to determine peak wastewater flows, resulting in a total of approximately 523,590 gpd.

The City of Hayward treatment plant is currently undergoing expansion that will increase its capacity by approximately 3.4 mgd over the next year (from 13.1 to 16.5 mgd). With average dry weather flows of 0.167 mgd, the proposed project would utilize about five percent of this expanded capacity, representing a ***less-than-significant impact***.

Mitigation for Project Wastewater Flows. No significant impact has been identified; no mitigation is required.

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²CEQA Guidelines, Appendix G, Item s.

³City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

Table 35

PROJECT WASTEWATER GENERATION (PER 1995 WALPERT RIDGE SPECIFIC PLAN GENERATION FACTORS)

Land Use	Acres	Dwelling Units	Wastewater Generation Factor	Project Demand				
				ADWF (gpd)	Peaking Factor ¹	PPWF (gpd)	Infiltration (GWI+RDI/II)	PWWF (gpd)
Single Family	153.5	650	225 gpd/du ¹	146,250	3.0	438,750	0	438,750
School	6.3		600 gpd/ac ¹	3,780	3.0	11,340	0	11,340
Neighborhood Park	11.5		600 gpd/ac ¹	6,900	3.0	20,700	0	20,700
Tennis/Swim Club	7.0		1,600 gpd/ac ²	11,200	3.0	33,600	0	33,600
Golf Course Clubhouse	4.0		1,600 gpd/ac ²	6,400	3.0	19,200	0	19,200
TOTAL	189.9	650		174,530		523,590	0	523,590

SOURCE: "Preliminary Report for Storm Drainage, Sanitary Sewer, Water, Roads and Drainage for Hayward 1900 Property," Carlson, Barbee & Gibson, Revised June 11, 1997; and update memo dated July 10, 1997.

¹ Factor taken from 1995 Walpert Ridge Specific Plan.

² Factor taken from 1988 JMM Walpert Ridge Utilities System Evaluation.

Impact PS-9: Project Sewer Extension and Upgrading Needs. The development of the project would require extension and upgrading of sanitary sewers to serve the project. Some of the existing City sewers near the project are inadequately sized to accommodate the increased flow from the project. This is a **potentially significant impact** (see criterion (a) under "(1) Significance Criteria" above).

(a) Proposed Project Sewer System. There are no existing sanitary sewer facilities onsite, so new facilities would be necessary to provide sewer services to this project. The proposed sanitary sewer system would consist of on-site gravity sewers, pump stations, force mains, and off-site parallel relief sewers. These facilities would be constructed within, or adjacent to, streets whenever possible in order to minimize the use of cross country sewer lines. The proposed sanitary sewer system is shown on the conceptual plans dated June 20, 1997.¹

The sewers from the project are proposed to enter the City's collection system at the existing 10-inch sewer mains located at the eastern end of Fairview Avenue and at the intersection of Barn Rock Drive and Hayward Boulevard. This existing sewer main is stubbed to the property in Fairview Avenue. The proposed development will be served by on-site gravity sewer lines and off-site parallel relief sewers. Wastewater collection is to be accomplished by gravity everywhere in the system with the exception of the elementary school, which would require pumping to the existing 10-inch sewer main. The school's pump station would be a duplex system.

(b) Required Offsite Improvements. Two off-site improvements to the sewer collection system are required and were recommended in the *City of Hayward Wastewater Master Plan* prepared by Montgomery Watson in October 1995. These include construction of a 1,500-foot section of 10-inch sewer main in Hayward Boulevard, starting at Plumas Court and continuing west along Hayward Boulevard until connecting to the existing line. Wastewater from the Barn Rock Drive sewer main currently flows from Plumas Court into sewers in Skyline Drive. The second required improvement is to bypass the Vista Bahia Way sewers that receive flow from the existing Hayward Boulevard sewer main. Construction of an 1,100-foot section of 10-inch sewer main would link Hayward Boulevard sewers located to the west and east of Vista Bahia Way.

¹Carlson, Barbee & Gibson.

Mitigation PS-9: As a condition of project approval, require the applicant to install (a) a 1,500-foot section of 10-inch sewer main on Hayward Boulevard, starting at Plumas Court; and (b) an 1,100-foot section of 10-inch sewer main to bypass the Vista Bahia Way sewers. In addition, require the applicant to verify the adequacy of the existing 10-inch main on Barn Rock Drive to handle the wastewater flows from the project. With these improvements, the project's effects on the City's sewage collection system would be reduced to a *less-than-significant level*.

6. PARKS AND RECREATION

a. Setting

(1) Local Park and Recreation Facilities. The Hayward Area Recreation and Park District (HARD) provides park and recreation facilities and services in the City of Hayward. HARD operates local recreation facilities such as playgrounds and parks, as well as district-wide parks and specialized facilities such as swim centers and a golf course. Existing HARD park facilities generally range from 3 to 20 acres in size and, depending on their individual purpose, serve areas within a radius of 0.5 mile (for small neighborhood parks) to citywide (for community facilities).

HARD either owns the various park and recreation sites in its jurisdiction outright or, through lease agreements, operates and maintains sites that are owned by the City or the school district. HARD maintains a master lease agreement with the City of Hayward for park and recreation sites owned by the City (see Item 3, "City Park Dedication Requirements," below).¹ HARD also leases some park sites owned by the Hayward Unified School District.

In the project site vicinity, HARD manages the following parks, recreational facilities, and future park sites:²

- **Canyon View Park**, a six-acre "active" recreation park on Farm Hill Drive west of the project site;
- **Highland Park**, located at Highland Elementary School and managed by HARD;
- **College Heights Park**, a three-acre park on Hayward Boulevard that is managed by HARD;

¹Telephone conversation with Eric Willyerd, Park Superintendent, Hayward Area Park and Recreation District, April 18, 1995; and Hanson Hom, City Landscape Architect, City of Hayward, April 27, 1995.

²Eric Willyerd, Parks Superintendent, Hayward Area Recreation and Park District (HARD); personal communication, June 12, 1997.

- **Recreational facilities at California State University, Hayward** (approximately 2.5 miles west of the project site) that are managed and maintained by HARD;
- **Two park sites in the Five Canyons subdivision** (one eight-acre site and one two-acre site), located north of the project site;
- **The Lewis property park site**, a 10-acre property located on the north side of Hayward Boulevard opposite Fire Station No. 5, approximately one-half mile west of the project site; and
- **Bicycling, hiking, and equestrian trails** managed by HARD and the East Bay Regional Park District (EBRPD) along Ward Creek north of Hayward Boulevard up to Walpert Ridge.

(2) HARD Park Standards. As summarized in Table 36, HARD has established citywide park standards of 1.5 acres of "local" parkland per 1,000 persons, six acres of "community" parkland per 1,000 persons, 2.5 acres of "other" land (e.g., community centers) per 1,000 persons, and 3.0 acres of "regional" parkland per 1,000 persons. HARD uses these standards to determine the adequacy of parkland within its jurisdiction.¹ The Hayward area generally has adequate park facilities, based on these standards.² (The East Bay Regional Park District is not bound by the HARD standard for determining adequacy of regional parks, however.³)

(3) City Park Dedication Requirements. As indicated by Table 37, the *City of Hayward Park Dedication Ordinance* (Article 4, Section 7-4.00 of the Hayward Municipal Code) requires housing developers to dedicate between 436 and 675 square feet of parkland per residential unit, depending on lot size. Alternatively, developers may pay an in-lieu park fee (\$3,000 per single-family detached unit; \$2,300 per attached unit), or provide a combination of dedicated parkland and fee payment. The *Park Dedication Ordinance* also allows credit for private recreation facilities, and for improvements to existing public parkland.⁴ The City leases the dedicated parkland to HARD at nominal cost.

¹City of Hayward, General Policies Plan, page VII-7 and VII-11; and City of Hayward Growth Management Element, page 44.

²Willyerd; and Hayward Area Recreation and Park District Master Plan Technical Report, prepared for the Hayward Area Recreation and Park District by the Planning Collaborative, Inc., May 1990, pages 63-64.

³Telephone conversation with Linda Chavez, Park Planner II, East Bay Regional Park District, April 17, 1995.

⁴Telephone conversation with Hanson Hom, City Landscape Architect, City of Hayward, April 27, 1995.

Table 36

HAYWARD AREA RECREATION AND PARK DISTRICT PARK ACREAGE STANDARDS

<u>Type of Park</u>	<u>Service Radius</u>	<u>Size</u>	<u>Acreage Per 1,000 Population</u>
Local	1/4 to 1/2 mile	3-10 acres	1.5 acres
Community	2 to 3 miles	15-20 acres	6.0 acres
Other*	(as appropriate)	(as appropriate)	2.5 acres
		Total:	10.0 acres
Regional	1/2 hour driving time	100+ acres	3.0 acres

SOURCE: Hayward Area Recreation and Park District Master Plan *Technical Report*

* Includes community centers, aquatic centers, special use facilities, playfields.

Table 37

CITY OF HAYWARD PARKLAND DEDICATION STANDARDS

<u>Residential Density or Type of Housing</u>	<u>Average Lot Size Per Dwelling Unit*</u>	<u>Area of Parkland Required Per Dwelling Unit</u>
Suburban/Low Density	more than 5,000 square ft.	675 square feet
Medium Low Density	3,500-5,000 square feet	566 square feet
Medium High Density	2,500-3,500 square feet	501 square feet
High Density	less than 2,500 square ft.	436 square feet

SOURCE: City of Hayward

* Average lot size excludes open space parcels and public streets.

(4) Local Golf Course Facilities. Existing golf course facilities currently operating in the immediate Hayward area are limited to the 125-acre, 18-hole Skywest Golf Course, located at 1401 Golf Course Road in the northern portion of the city, west of Interstate 880 and Hesperian Boulevard, approximately seven miles from the project site. The Skywest Golf Course is operated by HARD. Other golf courses in the vicinity that are used by Hayward residents include:

<u>Golf Course</u>	<u>Location</u>	<u>Distance from Project Site (approx).</u>
Willow Park (18 holes)	17007 Redwood Road, Castro Valley	10 miles north
Tony Lema (18 holes)	13800 Neptune Drive, San Leandro	10 miles northwest
Sunol Valley (two 18-hole courses)	6900 Mission Road, Sunol	15 miles southeast
Lake Chabot Municipal (18 holes)	Golf Links Road, Oakland	15 miles north
Alameda Municipal (two 18-hole courses; one 9-hole course)	Maitland Drive, Alameda	15 miles northwest
Parkway (9 holes)	3400 Stevenson Boulevard, Fremont	8 miles southeast

Most of these courses are reported to be operating at or close to maximum capacity.¹ The Parkway Golf Course in Fremont is expected to close in 1997 in anticipation of residential development on the site.

(5) Identified Golf Course Needs. According to HARD studies, a strong demand remains for more golf course facilities in the Hayward area.² The *Technical Report* for the HARD Master Plan states that "golf courses are considered to be in short supply by all indicators." The report further notes that the closure of the Hayward Golf Course, which operated near the intersection of Mission Boulevard and Industrial Parkway in southern Hayward until 1986, "has contributed directly to the crowding at other local courses. The optimum level of service is established as what would exist if the Hayward Golf Course were still currently in service."³

The HARD level of service standard for golf courses is one local course for every 70,000 people. The actual HARD area level of service provided as of 1989 by the Skywest and

¹Telephone conversation with Rick Silva, Golf Course Manager, Skywest Golf Course, May 4, 1995.

²Willyerd.

³Hayward Area Recreation and Park District Master Plan *Technical Report*, prepared for the Hayward Area Recreation and Park District by the Planning Collaborative, Inc., May 1990, page 69.

Willow Park¹ golf courses (36 holes total) was approximately one course for every 107,000 people (i.e., two courses for a population of 214,000 people). Based on the standard of one course per 70,000 people, the HARD Master Plan Technical Report identified a total demand in 1989 for three golf courses in its service area, or one more 18-hole facility in addition to the two existing courses.² The population of the HARD service area currently totals approximately 241,000 people (1995).³ No new golf courses have opened in the area since 1989. Based on the HARD-suggested standard of one 18-hole course per 70,000 people, it appears that there is a current (1995) need for approximately one-and-one-half additional 18-hole golf courses in the area.⁴

In addition to the 18-hole golf course proposed as part of the project evaluated in this SEIR, the City of Hayward has received dedication of land for a nine-hole golf course on the former Hayward Golf Course site, and is currently processing an application for development of this golf course.

(6) Adopted Local Policies Regarding Golf Course Needs. The HARD Master Plan contains a policy to *"encourage development of a public golf course in one of the developing areas. At a minimum this could be a 9-hole, 3-par course, located as part of a residential development in the hills or as part of the developing Industrial/Shorelands areas."*⁵

The HARD Master Plan also contains a policy to *"as feasible, work with the East Bay Regional Park District to add one or two golf courses--one nine-hole, one 18-hole, over the next 15 years to meet District-wide and region-wide demand."*⁶

¹While not located within the Hayward Area Recreation and Park District, the Willow Park Golf Course was included in the level of service calculations due to its close proximity to the district boundary (telephone conversation with Eric Willyerd, Park Superintendent, Hayward Area Recreation and Park District, May 3, 1995).

²Hayward Area Recreation and Park District Master Plan Technical Report, prepared for the Hayward Area Recreation and Park District by the Planning Collaborative, Inc., May 1990, pages 69-71.

³Population data from HARD and the Alameda County Planning Department indicate that the HARD service area population (Hayward, Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview) was 214,000 in 1989, 224,000 in 1990, and 236,000 in 1993. No HARD or county data is currently available for 1995. Assuming the same 1989-1993 growth rate, the estimated 1995 total is 241,000.

⁴Current population = approx. 241,000; $241,000 \div 70,000 = 3.44$ total golf courses needed; 3.44 minus 2 existing golf courses = 1.44 golf courses need.

⁵Hayward Area Recreation and Park District Master Plan Technical Report, prepared for the Hayward Area Recreation and Park District by the Planning Collaborative, Inc., May 1990, Policy 4.0-7, page 27.

⁶Hayward Area Recreation and Park District Master Plan Technical Report, Policy 7.0-10, page 33.

(7) Regional Park and Recreation Facilities. The East Bay Regional Park District (EBRPD) provides regional parks, recreation areas, wilderness preserves, and trails for Alameda County and Contra Costa County residents. In the project area, EBRPD maintains Garin Regional Park and Dry Creek Pioneer Regional Park, which adjoin the project site to the southwest (see Figure 3 in section III, Project Description). These parks provide 3,145 acres of land for nature study, picnicking, hiking, horseback riding, and fishing. In addition, EBRPD has acquired (1) an approximately 1,100-acre property (not open for public use) adjoining the east side of the project site; and (2) a 283-acre regional trail corridor adjoining the northern corner of the project site, which will contain the future alignment of the Bay Area Ridge Trail.¹

On the project site, EBRPD currently maintains an easement for the Garin Park Trail. This trail, which is currently in use, extends from Hayward Boulevard/Fairview Avenue south through the site along an existing fire road to Garin Regional Park. In addition, the Bay Area Ridge Trail alignment is planned to extend through the central portion of the project site.²

(8) Adopted Local Policies Regarding Regional Park Facilities. The City of Hayward General Policies Plan (page VII-14) contains the following strategies that pertain to the project site:

- *"Implement plans for a continuous greenbelt from Lake Chabot to Garin Park with development policies that are coordinated with Alameda County, HARD, EBRPD, and other agencies."*
- *"Support regional efforts to expand opportunities for camping, picnicking, swimming, hiking, and riding opportunities both within the city and the planning area."*
- *"Provide for separate vehicular, pedestrian, and equestrian circulation, pullovers, and picnic sites in the Hayward Hills."*

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 38 summarizes park and recreation impacts and mitigation measures identified in the 1991 EIR.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on parks and recreation if it would:

¹Linda Chavez, Park Planner, East Bay Regional Park District; personal communication, June 11, 1997.

²Chavez.

Table 38

1991 EIR PARK AND RECREATION IMPACT AND MITIGATION FINDINGS

Impact Summary

For development of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5, the City of Hayward and Hayward Area Recreation and Park District (HARD) would require a minimum park acreage to be provided on the project site.

Mitigation Summary

For development of 700 housing units, require dedication of seven to 11 acres of parkland, with one park adjacent to any onsite school. For development of 900 housing units, require dedication of nine to 14 acres of parkland, with one park adjacent to any onsite school.

Require dedication of appropriate open space to East Bay Regional Park District. Maintain a buffer zone between private and public open space. Permit right-of-way access through the site for trails to Garin and Dry Creek Pioneer Regional Parks. Require future project developers to work with the Bay Ridge Trail organization to determine access for connecting the east and west trail segments.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including parks or recreational facilities;¹
- (b) Result in an impact upon the quality or quantity of existing recreational opportunities;²
- (c) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element* ³) and the Hayward Area Recreation and Park District (HARD) Master Plan; or
- (d) Reduce the City's ability to meet established local park acreage standards.

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact PS-10: Project-Related Increase in Local Park Demand. The project's estimated 1,911 residents would increase the demand for local park and recreational facilities. The project would provide one approximately five-acre public park (with specific improvement needs and responsibilities to be determined by the applicant and HARD), along with nine private village mini-parks, a swim and tennis club, a privately managed 18-hole golf course, alignments for the Bay Area Ridge Trail and Garin Park Trail, a trail staging area, and dedication and/or preservation of approximately 1,000 acres of open space. The five-acre public park would not meet HARD park acreage standards or City of Hayward parkland dedication requirements, although the applicant may apply to the City Council for a 50-percent reduction in the parkland dedication requirement. This potential park and recreational facility inadequacy represent a ***potentially significant impact*** (see Criteria a through d under "(1) Significance Criteria" above).

(a) Project Consistency with City Parkland Dedication Requirements. The *City of Hayward Park Dedication Ordinance* (Article 4, Section 7-4.00 of the Hayward Municipal Code) would require the project applicant to dedicate approximately 9.96 acres of parkland (see Table 39), or pay an in-lieu fee of approximately \$2.0 million, based on the City's current fee schedule. For a project of this size, the City would require dedication of parkland. The dedicated parkland proposed by the project (five acres) would not meet the City's dedication requirement (9.96 acres). The applicant may petition the Hayward City Council to waive up to 50 percent of the City's parkland dedication requirement due to provision of private facilities

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²CEQA Guidelines, Appendix I, Item II.19.

³City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

Table 39

CITY PARKLAND DEDICATION REQUIREMENTS FOR PROPOSED PROJECT

<u>Lot Size Proposed By Project</u>	<u>Number of Units Proposed by Project</u>	<u>Dedication Requirement</u>	<u>Parkland Required</u>
5,000 square feet	47 units	566 sq. ft./unit	0.61 acre
5,500 square feet	271 units	675 sq. ft./unit	4.20 acres
6,000 square feet	203 units	675 sq. ft./unit	3.15 acres
7,000 square feet	19 units	675 sq. ft./unit	0.29 acre
7,500 square feet	76 units	675 sq. ft./unit	1.18 acres
8,000 square feet	16 units	675 sq. ft./unit	0.25 acre
10,000+ square feet	18 units	675 sq. ft./unit	0.28 acre
TOTAL:	650 units		9.96 acres

SOURCE: City of Hayward *Park Dedication Ordinance* (Article 4, Section 7-4.00 of the Hayward Municipal Code).

such as the project-proposed golf course, swim and tennis club, and private mini-parks. This provision may allow the applicant to reduce the project's dedicated parkland requirement to approximately five acres.¹

(b) Project Consistency with HARD Park Acreage Standards. The 650 single-family housing units proposed by the project could be expected to produce a population of approximately 1,911 persons, based on the Association of Bay Area Governments estimate of 2.94 persons per household for the Hayward area in the year 2000.² Applying the HARD park acreage standards listed in Table 37, this population would create a need for approximately 19.2 acres of parkland, consisting of:

- 2.9 acres of *local* parkland (1.5 acres per 1,000 persons),
- 11.5 acres of *community* parkland (6.0 acres per 1,000 persons), and
- 4.8 acres of *other* parkland (e.g., community centers) (2.5 acres per 1,000 persons).

The proposed site plan for the project designates a five-acre neighborhood park site adjoining the proposed school site in the northwestern portion of the project, near Fairview Avenue/Hayward Boulevard (see Figure 6 in section III, Project Description). The project applicant has indicated that this parkland acreage would be dedicated to the City of Hayward; the City would then enter into a Master Lease Agreement with HARD to allow development and maintenance of the park by HARD. The project would also include nine private village mini-parks (seven total acres), a swim and tennis club, a private 18-hole golf course, alignments for the Bay Area Ridge Trail and Garin Park Trail, a trail staging area, and preservation of approximately 1,000 acres of open space, which would either be (1) dedicated to the East Bay Regional Park District or other public interest agency, (2) deeded to the local homeowners' association, or (3) retained by Hayward 1900 as open space.

While the park acreage proposed for dedication to HARD (five acres) does not meet HARD standards for total parkland acreage (19.2 acres), the City's parkland dedication and 50-percent waiver provisions (see item (a) above) would take precedence over the HARD standards. In addition, however, HARD has indicated that, even with joint use of the adjoining elementary school playground area, the five-acre site may not be of adequate size and configuration to accommodate soccer, softball, and baseball fields and surrounding observation areas, due to the relatively steep topography in this portion of the project site.³ Provision of the proposed golf course, swim and tennis club, private mini-parks, and dedicated

¹Article 4, Section 7-4.32 of the Hayward Municipal Code.

²Association of Bay Area Governments, Projections 96, page 122.

³Willyerd; and letter from Wes Asmussen, General Manager, Hayward Area Recreation and Park District, to Hanson Hom, City of Hayward, March 21, 1997.

open space area and trails would not be expected to alleviate the demand for play fields and other public park and recreation facilities, according to a HARD representative.

Mitigation PS-10: Prior to project approval, require the applicant and HARD to develop an adequate configuration for the proposed onsite park that is acceptable to the City of Hayward, and to identify specific improvement needs and responsibilities. This measure would reduce the impact to a *less-than-significant level*.

One possible approach to resolving the problem of the currently inadequate acreage proposed for the park site would be to link the proposed park to an adjoining park site planned for the Bailey property, immediately west of the Hayward 1900 site. According to a HARD representative, development of a joint park site on these two properties could produce an adequate local park.¹

The applicant and HARD would determine specific improvement needs and responsibilities for the project neighborhood park facilities. HARD recommends establishment of an assessment district to fund future maintenance of the local park.²

Impacts on Golf Course Demand. The project would provide an 18-hole private golf course, which would assist in meeting existing and projected local demand for golf course facilities. This is a *less-than-significant (beneficial) impact* of the project (see Criteria a and b under "(1) Significance Criteria" above).

HARD anticipates that, with development of the 18-hole golf course proposed by the project and the nine-hole golf course currently proposed on the former Hayward Golf Course site, the identified unmet golf course demand in the Hayward area will be met.³

Mitigation for Impacts on Golf Course Demand. No significant impacts have been identified; no mitigation is required.

¹Willyerd.

²Asmussen.

³Willyerd.

Impact PS-11: Project-Related Increase in Regional Park Use. The project's estimated 1,911 residents would increase demands on regional park and recreational facilities, including the adjoining Garin and Dry Creek Pioneer Regional Parks and onsite and surrounding regional trails. The possibility of trespassing in park areas not intended for public use and/or during hours when parks are closed would also increase. This is a **potentially significant impact** (see Criteria a and b under "(1) Significance Criteria" above).

(a) Project-Generated Regional Park Use. Due to the project's close proximity to Garin and Dry Creek Pioneer Regional Parks, project residents would be likely to visit these parks and use the associated regional trail system. The possibility of trespassing in park areas not intended for public use and/or during hours when the parks are closed would also increase. (See also section IV.A, Land Use and Open Space.)

The project includes the following features that would assist in mitigating its impact on regional park facilities:

- **Trail Staging Area.** The project proposes to provide a trail staging area (in the proposed joint school/park site) for access to Garin Regional Park.
- **Trail Alignments.** The project proposes to provide two regional trail alignments through the project site: (1) a Bay Area Ridge Trail link through the central portion of the site, and (2) relocation of the Garin Park Trail extending from the joint school/park site along the western project site boundary to Garin Regional Park (see Figure 9 in section III, Project Description).
- **EBRPD Property Exchange.** The project includes a property exchange between the project applicant, Hayward 1900, and EBRPD to incorporate 20 acres of EBRPD property located immediately southwest of the Hayward 1900 property in the vicinity of Garin Regional Park into the project site (see Figure 5 in section III, Project Description). The project proposes extension of a private road onto this property (see Figure 6 in section III). The EBRPD property would be exchanged for approximately 1,000 acres of onsite open space that would be dedicated to EBRPD. If EBRPD does not accept this dedication, the 1,000-acre open space area would be dedicated to another public agency, deeded to the local homeowners' association, or retained by Hayward 1900 as open space. In accordance with State law, the property exchange would require unanimous approval by the EBRPD Board of Directors, which is authorized to approve property exchanges for a maximum of ten acres per year; EBRPD approval of the 20-acre property exchange proposed by the project would therefore require a minimum of two years.¹

¹Chavez.

(b) Other Impacts on EBRPD Facilities. Section IV.B (Visual Factors) of this SEIR addresses the project's visual impact on views from Garin Regional Park. Section IV.C (Vegetation and Wildlife) addresses project impacts on wildlife habitat in adjoining EBRPD properties, and section IV.F (Drainage and Water Quality) evaluates potential drainage and water quality impacts on area creeks, including those on EBRPD properties. Section IV.K (Cultural Resources) addresses potential project impacts on an existing historic structure on the EBRPD property contained within the project site.

Mitigation PS-11: In addition to development of the trail staging area, provision of the Garin Park Trail and Bay Area Ridge Trail alignments and dedication and/or preservation of onsite open space as proposed by the project, require the applicant to (1) provide barbed wire fencing (with gates) around dedicated onsite open space areas, and (2) replace any fencing on EBRPD property that is removed during project construction. These measures would reduce the project's impact on EBRPD facilities to a ***less-than-significant level***.

Impact PS-12: Cumulative Increases in Local and Regional Park Demands.

Additional residential development in the Walpert Ridge area and citywide would increase the demand for local and regional park and recreational facilities. This is a ***potentially significant impact*** (see Criteria a through d under "(1) Significance Criteria" above).

A total of 805 single-family housing units (including the 650 units proposed by the project) have been approved, are pending approval, or may be proposed for approval in the future in the project site vicinity.¹ Citywide, City staff estimates that up to 8,976 additional housing units (including the 805 units in the Walpert Ridge area) could be constructed.² This pending residential development would produce cumulative increases in demand for park and recreation facilities (neighborhood, community, and regional parks, as well as other facilities) in the Hayward area.

¹Memorandum from Hanson Hom, City of Hayward, to John Wagstaff et.al., re. "Potential Units on Walpert Ridge," May 7, 1997.

²Fax transmittal from Matt Tomas, City of Hayward, to Natalie Macris, Wagstaff and Associates, re. City of Hayward Housing Development Potential: 1995," June 12, 1997.

Mitigation PS-12: Implement *Mitigations PS-10 and PS-11*. These measures would reduce the project's contribution to this cumulative impact to a ***less-than-significant level***. In addition, the City should work with other future residential developers in the city to secure applicable parkland dedications and/or in-lieu fees, and to develop similar phasing and monitoring plans for park improvements to ensure that adequate parks are constructed to serve the demands of new development.

7. LIBRARY SERVICES

a. Setting

The City of Hayward provides library services for the community. The nearest public library to the project site is the Hayward Main Library, located in downtown Hayward about four miles west of the site. The library contains 29,500 square feet of space, maintains a collection of 186,000 items, and offers 4,370 hours of service each year. Compared with services in other Bay Area cities, Hayward's library services are inadequate in terms of physical size, size of collection, hours of operation, and staffing.¹

The City adopted a Library Strategic Plan in 1992 that assessed current and future service needs for the community. Adopted goals included (1) providing a minimum of 75,000 square feet of library space, (2) achieving a collection size of 350,000 items, (2) offering 11,200 hours of service annually, and (4) reaching staffing levels comparable to the regional standard for the size of population served.²

In 1996, the Mayor's Blue Ribbon Task Force on Library Services updated the 1992 Plan, and prepared a Findings and Recommendations Report that proposes construction of a new main library in downtown Hayward, with conversion of the existing main library to a community center. The November 1997 local ballot will include a measure that would authorize a two-percent utility tax to fund the library improvements. This measure, if approved, would generate approximately \$3 million per year for these improvements.³

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

The 1991 EIR did not address Walpert Ridge Specific Area Plan impacts on library services.

¹City of Hayward, "Administrative Draft Initial Study, Blue Rock Country Club," January 16, 1996, Attachment A, page 53.

²Ibid.

³Marilyn Baker-Madsen, Library Director, Hayward Public Library; personal communication, June 12, 1997.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on library services if it would:

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including library services;¹
- (b) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan Growth Management Element, which states that "*the Hayward library system should meet or exceed the average of comparable Bay Area cities.*"²

(2) Impacts and Mitigation Measures. The project would have the following impacts on library services.

Project-Related Increase in Demand for Library Services. The estimated 1,911 project residents would increase the demand for services provided by the City of Hayward library system. It is expected that property taxes from the project could fund any library service increases necessary to respond to this demand. The project's effect on library services would therefore represent a ***less-than-significant impact*** (see Criteria a and b under "(1) Significance Criteria" above).

Mitigation for Project-Related Increase in Demand for Library Services. No significant impacts have been identified; no mitigation is required.

Cumulative Increase in Demand for Library Services. The project would contribute to cumulative increases in demand for library services in the Walpert Ridge area. It is expected that property taxes from the project would fund any library service increases necessary to respond to project-related demand. The project's contribution to the cumulative increase in library service demand would therefore represent a ***less-than-significant cumulative impact*** (see Criteria a and b under "(1) Significance Criteria" above).

Development of a golf course and single-family housing (650 units) on the project site, combined with single-family residential development on the nearby Bailey and Carden properties, would produce an estimated total of 805 new housing units in the Walpert Ridge area. This new development would increase demands for library services.

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993, page 49.

Mitigation for Cumulative Increase in Demand for Library Services. No significant impacts have been identified; no mitigation is required.

8. SOLID WASTE SERVICES

a. Setting

The City of Hayward currently has a franchise agreement with Waste Management of Alameda County (WMAC) for collection and disposal of solid waste generated within the city's jurisdiction. WMAC collects an average of 1.3 bins of waste (with each bin containing 32 gallons) per week from each single-family housing unit. WMAC hauls the city's waste to the Davis Street Transfer Station in San Leandro. From here, the waste is transferred to the Altamont Landfill. This landfill has capacity to receive the city's waste for the foreseeable future.¹

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

The 1991 EIR did not address Walpert Ridge Specific Area Plan impacts on solid waste services.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on solid waste services if it would:

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including solid waste services;²
- (b) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element* ³).

(2) Impacts and Mitigation Measures. The project would have the following impact on solid waste services.

¹City of Hayward, Stony Brook Place Residential Development Final EIR, November 1995, page 216; and Bill Rose, Division Operations Manager, Waste Management of Alameda County; personal communication, June 13, 1997.

²CEQA Guidelines, Appendix I, Items II.14 and II.16.

³City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

Project-Related Increase In Demand for Solid Waste Services. Based on the experience of WMAC, the 650 single-family housing units proposed by the project would generate approximately 27,040 gallons of waste per week. The proposed golf course and related uses would generate an additional three cubic yards of waste per week. WMAC does not foresee any problems with collecting or disposing of this waste.¹ The project's effect on solid waste collection and disposal services would therefore represent a ***less-than-significant impact*** (see Criteria a and b under "(1) Significance Criteria" above).

Mitigation for Project-Related Increase in Demand for Solid Waste Services. No significant impacts have been identified; no mitigation is required. However, the City should review the project plans to ensure that the golf clubhouse site design provides adequate room for a three-cubic-yard solid waste container and collection vehicle access.

Cumulative Increase in Demand for Solid Waste Services. A total of 805 single-family housing units (including the 650 units proposed by the project) have been approved or are pending approval in the project site vicinity.² Citywide, City staff estimates that up to 8,976 additional housing units (including the 805 units in the Walpert Ridge area) could be constructed.³ This pending residential development will produce cumulative increases in demand for solid waste collection and disposal services provided by WMAC. Given that WMAC has a franchise agreement with the City of Hayward for solid waste collection and disposal, and that the Altamont Landfill has capacity to receive the city's waste for the foreseeable future, this increase in demand would represent an ***less-than-significant cumulative impact*** (see Criteria a and b under "(1) Significance Criteria" above).

Mitigation for Cumulative Increase in Demand for Solid Waste Services. No significant impacts have been identified; no mitigation is required.

9. OTHER GOVERNMENT SERVICES

a. Setting

(1) Road Maintenance. The City of Hayward Department of Public Works provides street sweeping, street repairs, storm drainage maintenance and tree trimming services in public

¹Rose.

²Memorandum from Hanson Horn, City of Hayward, to John Wagstaff et.al., re. "Potential Units on Walpert Ridge," May 7, 1997.

³Fax transmittal from Matt Tomas, City of Hayward, to Natalie Macris, Wagstaff and Associates, re. City of Hayward Housing Development Potential: 1995," June 12, 1997.

rights-of-way. Street sweeping is scheduled at three-week intervals, and drains are generally inspected and cleared of debris once a year. Tree trimming and general maintenance of street trees, median strips, and roadside plantings is scheduled on a tract-by-tract basis.¹ These services are not currently provided on the project site, which is undeveloped and does not contain public rights-of-way.

(2) Gas and Electrical Service. Pacific Gas and Electric Company (PG&E) provides natural gas service in the project site vicinity. Gas transmission lines, varying in size from four to six inches, are located along Hayward Boulevard/Fairview Avenue. There are no gas transmission lines currently serving the project site. PG&E provides electrical service to the project site with a 12 kilovolt (kV) overhead wood-pole line.²

The project site contains a 75-foot-wide PG&E transmission line easement that extends in a northwest-southeast direction through the central portion of the project site (see Figure 5 in section III, Project Description). PG&E prohibits the location of any structures or other permanent obstructions within transmission line easements that would inhibit maintenance access to a transmission line or tower. Typical landscaping, parking areas, and fencing are generally allowable.

(3) Telephone Service. Pacific Bell provides local and regional telephone service and access to long-distance telephone services in Hayward. There are no telephone facilities on the project site. The nearest telephone lines are located in Hayward Boulevard/Fairview Avenue.³

b. Impact and Mitigation Findings--1991 Specific Area Plan EIR

Table 40 summarizes other government service impacts and mitigation measures identified in the 1991 EIR.

c. Supplemental Impact Findings and Mitigation Needs

(1) Significance Criteria. The project would be expected to have a *significant impact* on other government services if it would:

¹Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991), page 114.

²Ibid.

³Ibid.

Table 40

1991 EIR OTHER GOVERNMENT SERVICE IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5 would require additional telephone cable and a telephone distribution plant.

The project (700 or 900 housing units) and cumulative development would require a new underground gas distribution system and electric distribution system. Existing wood pole lines would need to be reconstructed.

With development 700 or 900 housing units, streets, street landscaping, and street lights would require maintenance.

Mitigation Summary

Provide required telephone cable and distribution systems.

Provide additional electric transmission and distribution, and gas distribution to meet project demands.

Dedicate roads as scenic routes, as required by the City of Hayward. Establish a lighting and landscaping district. Construct all streets to meet City of Hayward specifications.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- (a) Result in a need for new systems, or substantial alterations to services or utilities, including governmental services;¹ or
- (b) Result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the City of Hayward General Plan (including the *Growth Management Element* ²).

(2) Impacts and Mitigation Measures. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Project Road Maintenance Impacts. Project roadways would be private, and would be maintained by the local homeowners' association. Project effects on City of Hayward road maintenance services would therefore represent a ***less-than-significant impact*** (see Criteria a and b under "(1) Significance Criteria" above).

Mitigation for Project Road Maintenance Impacts. No significant impacts have been identified; no mitigation is required.

Project Demand for Gas and Electrical Services. The project would increase demand for gas and electrical services supplied by PG&E, which provides these services in response to market demand. These services would be provided through infrastructure (cables, etc.) that would be installed when project roads and other utilities are constructed. Once in operation, gas and electrical services would be funded by user fees. The project's effect on these services would therefore be considered a ***less-than-significant impact*** (see Criteria a and b under "(1) Significance Criteria" above).

PG&E does not foresee any problems with serving the project. The amount of the required contribution by the applicant to installation of gas and electrical facilities would depend on the total estimated project use of gas and electricity (see section IV.L, Energy, of this SEIR).³

Mitigation for Project Demand for Gas and Electrical Services. No significant impacts have been identified; no mitigation is required.

¹CEQA Guidelines, Appendix I, Items II.14 and II.16.

²City of Hayward, City of Hayward Growth Management Element, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993.

³Al Spatcher, Land Agent, PG&E; personal communication, June 24, 1997.

Impact PS-13: Access to PG&E Transmission Line Easement. The project has the potential to interfere with PG&E equipment access to the electrical transmission line easement located in the central portion of the project site. This represents a ***potentially significant impact*** (see Criterion a under "(1) Significance Criteria" above).

The project plans do not specify what type of access would be provided to the PG&E easement. The access road to project Neighborhood G would pass through the easement, and portions of the golf course, the swim and tennis club, and residential lots in Neighborhoods A and G would adjoin the easement.

Mitigation PS-13: Require the project to provide adequate access for PG&E to the PG&E transmission line easement. Forward project plans to PG&E for review, comment, and approval of PG&E easement access provisions. These measures would reduce the impact to a ***less-than-significant level***.

Project Demand for Telephone Service. The project would increase demand for telephone service supplied by Pacific Bell, which provides these services in response to market demand. These services would be provided through infrastructure (cables, etc.) that would be installed when project roads and other utilities are constructed. Pacific Bell would pay for trenching and line costs within public rights-of-way and, with the exception of individual connection lines to residential structures (which are also paid for by Pacific Bell), the applicant would pay for all necessary infrastructure improvements on private property. Once in operation, telephone service would be funded by user fees. The project's effect on these services would therefore be considered a ***less-than-significant impact*** (see Criteria a and b under "(1) Significance Criteria" above).

Mitigation for Project Demand for Telephone Service. No significant impacts have been identified; no mitigation is required.

I. NOISE

The following section addresses project impacts related to environmental noise. The section includes (1) a description of the existing noise setting at the project site (including a description of the fundamentals of environmental acoustics and relevant regulations); (2) a description of the impacts of project construction activities on the local noise environment, and of cumulative traffic increases (including project-generated traffic) over the long term on noise levels along sensitive local travel routes; (3) an assessment of the impacts of future traffic noise levels on the site; and (4) an identification of measures warranted to mitigate significant noise impacts.

1. SETTING

a. Fundamentals of Acoustics

Noise is defined as unwanted sound. The effects of noise can range from interference with sleep, concentration, and communication, to physiological stress, and at higher noise levels, to hearing loss.

Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Decibels and other related technical terms are defined in Table 41.

(1) Human Sensitivity to Noise. The method commonly used to quantify environmental noise involves measurement of all frequencies of sound, with an adjustment to reflect the fact that human hearing is less sensitive to low and high frequencies than to midrange frequencies. This measurement adjustment is called "A" weighting. A noise level so measured is called an A-weighted sound level (dBA).¹ Examples of typical A-weighted noise levels in the environment and industry are provided in Table 42.

Environmental noise fluctuates in intensity over time. Therefore, time-averaged noise level computations are typically used to quantify noise levels and determine impacts. The two average noise level descriptors that are most commonly used are L_{dn} and CNEL. L_{dn} , the day/night average noise level, is the 24-hour noise intensity average, with a 10 dBA "penalty" added for nighttime noise (10:00 PM to 7:00 AM) to account for the greater human sensitivity

¹In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve

Table 41
DEFINITIONS OF ACOUSTICAL TERMS

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound pressure, which is 20 micropascals (20 micronewtons per square meter).
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 PM to 10:00 PM and after addition of 10 decibels to sound levels in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level, L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 PM and 7:00 AM.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive Noise	Noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

SOURCE: Wagstaff and Associates, 1997.

Table 42

TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

<u>At a Given Distance From Noise Source</u>	<u>A-Weighted Sound Level in Decibels</u>	<u>Noise Environments</u>	<u>Subjective Impression</u>
	140		
Civil Defense Siren (100')	130		
Jet Takeoff (200')	120		Pain Threshold
	110	Rock Music Concert	
Pile Driver (50')	100		Very Loud
Ambulance Siren (100')			
	90	Boiler Room	
Freight Cars (50')		Printing Press Plant	
Pneumatic Drill (50')	80	In Kitchen With Garbage Disposal Running	
Freeway (100')			
	70		Moderately Loud
Vacuum Cleaner (10')	60	Data Processing Center	
		Department Store	
Light Traffic (100')	50	Private Business Office	
Large Transformer (200')			
	40		Quiet
Soft Whisper (S')	30	Quiet Bedroom	
	20	Recording Studio	
	10		Threshold of Hearing
	0		

SOURCE: Wagstaff and Associates, 1997.

to noise during this period. CNEL, the Community Equivalent Noise Level, is similar to L_{dn} , but adds a 5 dBA penalty to evening noise (7:00 PM to 10:00 PM). One way of anticipating a person's subjective reaction to a new noise is to compare the new noise with the existing noise environment to which the person has become adapted, i.e., the so-called "ambient" noise level.

b. Local Noise Compatibility Standards and Guidelines

The City of Hayward sets forth its policies related to community noise in the *Noise Element Policies Document* of the City of Hayward General Plan.¹ The goal of the Noise Element is to *"protect the public health, safety, and welfare against the adverse effects of excessive noise, consistent with the economic and environmental well being of the city."*

(1) Residential Development. Table 43 indicates that the City considers the noise environment to be *"normally acceptable"* for residential development up to an L_{dn} or CNEL² of 60 dBA, based upon the assumption that any buildings involved are of conventional construction without any special noise insulation requirements.

Residential development proposed where the CNEL or L_{dn} is up to 70 dBA is considered *"conditionally acceptable,"* meaning that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features are included in the residential design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Table 43 indicates that, between an L_{dn} or CNEL of 70 and 75 dBA, the noise environment is considered by the City to be *"normally unacceptable"* for residential uses, and new construction should generally be discouraged. If new construction or development does proceed, the requirements noted above for *"conditionally acceptable"* noise levels are applicable.





Where the CNEL or L_{dn} exceeds 75 dBA, the noise environment is defined as *"clearly unacceptable,"* and new residential construction or development should generally not be undertaken.

The City has also adopted design objectives for maximum interior noise levels and recommends a maximum hourly average noise level (L_{eq}) of 45 dBA inside new residences. This criterion is slightly more conservative (approximately two decibels lower) than the state interior standard, which is a L_{dn} or CNEL of 45 dBA.

¹City of Hayward General Plan, Noise Element Policies Document, adopted July 26, 1977.

²In practice, L_{dn} and CNEL usually do not differ by more than one to two dBA at any given location for transportation noise sources.

Table 43
CITY OF HAYWARD LAND USE/NOISE LEVEL COMPATIBILITY STANDARDS

LAND USE CATEGORY	COMMUNITY NOISE LEVEL L _{dn} or CNEL, dB							INTERPRETATION
	55	60	65	70	75	80	85	
Residential - Low Density Single Family, Duplex, Mobile Homes								 NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Residential - Multi-Family								
Transient Lodging - Motels, Hotels								 CONDITIONALLY ACCEPTABLE New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.
Schools, Libraries, Churches, Hospitals, Nursing Homes								
Auditoriums, Concert Halls, Amphitheatres								 NORMALLY UNACCEPTABLE New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Sports Arenas, Outdoor Spectator Sports								
Playgrounds, Neighborhood Parks								 CLEARLY UNACCEPTABLE New construction or development should generally not be undertaken.
Golf Courses, Riding Stables, Water Recreation, Cemeteries								
Office Buildings, Business, Commercial and Professional								
Industrial, Manufacturing, Utilities, Agriculture								

SOURCE: City of Hayward, Noise Element Policies Document, adopted July 26, 1977.

(2) Golf Courses, Riding Stables, Water Recreation. Table 43 indicates that golf courses, riding stables, and water recreation are considered by the City to be "*normally acceptable*" up to an L_{dn} of 75 dBA and "*conditionally acceptable*" up to an L_{dn} of 80 dBA.

(3) Neighborhood Parks. Table 43 indicates that neighborhood parks are considered by the City to be "*normally acceptable*" up to an L_{dn} of 70 dBA and "*conditionally acceptable*" up to an L_{dn} of 75 dBA.

(4) Schools. Table 43 indicates that schools are considered by the City to be "*normally acceptable*" up to an L_{dn} of 70 dBA and "*conditionally acceptable*" between 60 and 70 dBA.

c. State of California Noise Guidelines

The City's land use compatibility standards identified in Table 43 for community noise environments are essentially consistent with state noise guidelines, as outlined by the California Department of Health Services, California Office of Noise Control. In addition, the California Environmental Quality Act (CEQA) includes qualitative guidelines for determining the significance of adverse environmental noise impacts. According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a substantial increase in noise at a sensitive location such as a residence is considered to cause a significant adverse impact.

d. Existing Project Site Noise Environment

(1) Existing Noise Sources. The project site is currently undeveloped and used for cattle grazing. At present, there are no significant sources of noise on the project site or in the Walpert Ridge area. The primary sources of noise in the project vicinity are traffic noise along the closest roadways, Fairview Avenue and Hayward Boulevard, as well as residential activities at the adjacent Prominence subdivision, which is located between Fairview Avenue and Hayward Boulevard.

(2) Existing Noise Levels. A noise monitoring survey was conducted by Orion Environmental Associates on April 24 and 25, 1997¹ to quantify the existing noise levels along the two roadways that would serve as the primary access to the site. In addition, this survey also provided a baseline for existing noise exposure levels at homes of the Prominence subdivision. Noise levels were measured for 24 hours at two locations shown in Figure 33. Survey results are presented in Table 44.

Measurement Location 1 is located approximately 22 feet south of the centerline of Fairview Avenue, north of the residence located at 28070 Fox Hollow Drive. Vehicular traffic on

¹Measurements were made with Metrosonics 308 sound level meters which meet the requirements for ANSI Type II (ambient environment) accuracy. Meters were calibrated before the measurement period, April 24 and 25, 1997.

Figure 33

Noise Measurement Locations



SOURCE: Orion Environmental Associates

Blue Rock Country Club Project SEIR • City of Hayward
Wagstaff and Associates • Urban and Environmental Planners

Table 44
NOISE MEASUREMENT SURVEY RESULTS

Noise Parameter	Measured Noise Level (in dBA)			
	Measurement at Location 1 (Fairview Avenue) ¹	Adjusted Level at 50 Ft. from Centerline	Measurement at Location 2 (Hayward Boulevard) ²	Adjusted Level at 50 Ft. from Centerline
CNEL	64.7	59.3	63.2	58.4
Highest Hour Occurrence	63.3 5 PM - 6 PM	57.9	62.7 7 AM - 8 AM	57.9
Second Highest Hour Occurrence	62.9 6 PM - 7 PM	57.5	62.7 6 PM - 7 PM	57.9
Third Highest Hour Occurrence	62.9 8 AM - 9 AM	57.5	61.6 8 AM - 10 AM	56.8
Lowest Hour Occurrence	50.2 2 AM - 3 AM	44.8	45.9 2 AM - 3 AM	41.1
Daytime Noise Level (7 AM to 7 PM)	61.7	56.3	60.9	56.1
Evening Noise Level (7 PM to 10 PM)	61.5	56.1	60.4	55.6
Nighttime Noise Level (10 PM to 7 AM)	56.2	50.8	54.5	49.7

SOURCE: Orion Environmental Associates, 1997.

¹ Measurement Location 1 is located approximately 22 feet south of the centerline of Fairview Avenue, north of the residence located at 28070 Fox Hollow Drive.

² Measurement Location 2 is located approximately 24 feet north of the centerline of Hayward Boulevard, approximately 400 feet east of the Hayward Boulevard/Barn Rock Drive intersection.

Fairview Avenue was the primary source of noise at this location. However, pedestrian noise was another source of noise since the sidewalk, which is located only along the south side of Fairview Avenue, was approximately five feet from the noise meter. Reflection of traffic noise off the masonry wall located approximately five feet from the meter was another factor that influenced measured noise levels. There is also a moderate uphill grade at this location, which influenced traffic noise levels. The 24-hour CNEL noise level at this location was measured at 64.7 dBA at 22 feet, or 59 dBA at 50 feet.

Measurement Location 2 is located approximately 24 feet north of the centerline of Hayward Boulevard, approximately 400 feet east of the Hayward Boulevard/Barn Rock Drive intersection. Vehicular traffic on Hayward Boulevard was the primary source of noise at this location. The sidewalk, which is located only on the north side of Hayward Boulevard, was about five feet from the noise meter, and pedestrian noise could have been another noise source. The uphill grade along this road section is steeper than the grade on Fairview Avenue. The 24-hour CNEL noise level at this location was measured at 63.2 dBA at 24 feet, or 58 dBA at 50 feet.

Since the traffic volume is the same on both these streets, the 1 dBA difference between these two measurements is probably the result of variations in travel speeds due to the differences in road curves and grades, pedestrian activity in the vicinity of the meter, and noise reflection effects of the masonry wall along Fairview Avenue.

When compared to previous noise measurements taken on Fairview Avenue and Hayward Boulevard in 1977 and 1979, noise levels have decreased slightly along these roadways. In 1977 and 1979, L_{dn} noise levels were measured or estimated to exceed 60 to 68 dBA within 100 feet of the Hayward Boulevard and Fairview Avenue centerlines.

(3) Existing Sensitive Receptors. "Sensitive noise receptors" are generally considered to be uses that are sensitive to noise, including hospitals, schools, and residences. There are no existing schools or hospitals in the Walpert Ridge vicinity. Residential uses are located along Fairview Avenue and Hayward Boulevard. The Prominence subdivision is the residential area located closest to the site. Residences in this subdivision are set back approximately 50 feet or more from the centerline of Fairview Avenue and 40 feet or more from the Hayward Boulevard centerline. Along Fairview Avenue, the first floors of these two-story residences are protected by a five-foot high masonry wall, while the second floors extend above this wall. Noise measurements indicate that noise levels at existing Prominence residences are 59 dBA (CNEL) at 50 feet from the centerline, and the existing masonry wall would provide at least a 10-dBA noise reduction on the first floors. Such noise levels are considered "*normally acceptable*" under City land use compatibility guidelines.

The existing masonry wall extends continuously from Woodstock Road to just west of the Fairview Avenue/Hayward Boulevard intersection, protecting the lower floors of homes located along the north side of Fox Hollow Drive and east/south sides of Riding Club Court. There are two residences that are located within approximately 40 feet of the centerline of Hayward

Boulevard but are not protected by the masonry wall. One residence is located at the west end of Riding Club Drive; this home is located above the wall so that the wall does not shield this home from traffic noise. The other residence is located at the end of Quicksilver Court and has a framed wire fence around the backyard; its at-grade location with Hayward Boulevard results in direct exposure to traffic noise. All other Prominence residences located farther west along Hayward Boulevard have framed wire fencing, but are set back more than 100 feet and located uphill of the road. Noise measurements indicate that the two closest Prominence residences are subject to noise levels of 60 dBA (CNEL) at 40 feet from the centerline, which is considered "*normally acceptable*" under City land use compatibility guidelines.

Farther west along Hayward Boulevard (from Skyline Drive to just east of Plumas Court), there are about 11 residences that front onto this street and are located as close as approximately 40 feet from the roadway centerline (28673 Hayward Boulevard). West of Skyline Drive, residences are generally located above (uphill of) Hayward Boulevard with variable setbacks of 50 to 75 feet or more. Near Farm Hill Drive, Hayward Boulevard widens to a four-lane width, and residential setbacks vary from 50 feet to more than 100 feet from the road centerline. Based on noise measurements and traffic counts taken as part of this study, the closest existing residences to Hayward Avenue (40 feet from the roadway centerline) are currently subject to noise levels of 60 dBA (CNEL). When these noise levels are compared to City land use compatibility guidelines for noise, the noise environments at the closest residences not protected by walls or fences are considered "*normally acceptable*" for residential uses.

Farther north along Fairview Avenue (between Woodstock Road and East Avenue), existing residences have variable setbacks, generally ranging between 50 to more than 100 feet. Most homes along this road section front directly onto this roadway. Based on noise measurements and traffic counts taken as part of this study, the closest existing residences to Fairview Avenue (60 feet from the roadway centerline) are currently subject to noise levels of 58 dBA (CNEL). When these noise levels are compared to City land use compatibility guidelines for noise, the noise environments at the closest residences not protected by walls or fences are considered "*normally acceptable*" for residential uses.

2. IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC AREA PLAN EIR

Table 45 summarizes noise impacts and mitigation measures identified in the 1991 EIR. The 1991 EIR determined that project-related construction noise increases would be short-term and therefore not significant. However, the EIR also found that residents of the early phases of the project could be exposed to excessive noise levels during subsequent phases of construction. Although not explicitly stated, these excessive noise levels presumably would be mitigated to less-than-significant levels by implementation of recommended mitigation measures.

Table 45
1991 EIR NOISE IMPACT AND MITIGATION FINDINGS

Impact Summary

With development of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5, construction would generate high noise levels on and adjacent to the construction site.

Traffic-generated noise would increase by approximately one dBA at the four intersections modeled (Fairview Avenue/Oakes Drive, Second Street/E Street, Center Street/Kelly Street, and Fairview Avenue/Hayward Boulevard).

Project operational noise would increase noise levels by approximately 10 dBA.

The project would not conform to the City of Hayward Noise Element objective that seeks to protect relatively quiet areas and prevent (where feasible) future noise increases. However, the project would be consistent with objectives for promoting land use patterns in which noise-sensitive uses are grouped together and separated from major noise sources, and for locating sensitive uses away from areas where noise levels would exceed 60 dBA, L_{dn} .

Mitigation Summary

Restrict construction activities, including excavation and grading, to between 8:00 AM and 6:00 PM Monday through Saturday. Require the project contractor to use construction equipment with state-of-the-art noise shielding and muffling devices.

General residential noise cannot be mitigated to a level of insignificance.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

Project-related traffic noise increases were determined to be insignificant, while projected increases in the average ambient noise level from project-related residential activities were found to result in significant and unavoidable impacts. The EIR also determined that the project would not conform to the City of Hayward *Noise Element* objective which seeks to prevent future noise increases where feasible. However, the EIR found the project to be consistent with objectives for locating sensitive uses away from areas where noise levels would exceed 60 dBA (L_{dn}).

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

Potential noise impact concerns associated with the proposed project include:

- The extent to which temporary project construction activities would substantially increase noise levels in the area. The findings of this SEIR are consistent with the findings of the 1991 EIR, which determined significant construction noise increases and recommended noise controls as mitigation. However, since this SEIR represents a project-level impact analysis, mitigation measures that are tailored specifically to the project proposal are recommended.
- The extent to which project-generated traffic noise, residential neighborhood noise, and recreational noise, would adversely affect the existing and future residents in the area. The findings of this SEIR differ from the 1991 EIR since the 1991 noise analysis evaluated noise increases at intersections rather than along road links. In general, evaluation of intersection noise would consider traffic levels on both intersecting streets, which could underestimate the incremental noise increase due to the project since cross-street traffic noise is also included in the overall noise level. In addition, the analysis was based solely on noise modeling rather than being supplemented by actual noise measurements. Depending upon the assumptions used for travel speeds (which tend to be more variable at intersections where there is stopping and acceleration noise on the cross-street), noise model estimates would not necessarily accurately reflect noise levels along road links (where speeds are more constant and generally higher). Also, there were no adjacent sensitive receptors at the time the 1991 EIR was prepared so that impacts on these receptors could not be evaluated.
- The compatibility of the proposed residential and recreational development with the anticipated onsite noise environment. The findings of this SEIR differ from the 1991 EIR since there were no specific development plans that could be evaluated in the 1991 EIR.

a. Significance Criteria

(1) Substantial Increase in Noise Levels. The goals and policies contained in the City of Hayward's *Noise Element* were identified in the setting subsection above. Based on these goals and policies, project noise impacts would be considered *significant* if:

- noise resulting from the proposed project would increase average ambient noise levels (L_{dn}) by more than 3 dBA at a sensitive receptor and the resulting noise level would exceed 60 L_{dn} ; or
- noise resulting from the proposed project would increase average ambient noise levels (L_{dn}) by more than 5 dBA, even though the resulting level would remain below the normally acceptable 60 L_{dn} level.

These criteria for significance recognize:

- the threshold levels of acceptability established by the City of Hayward;
- that once the threshold level has been passed, any noticeable change above that level (a 3 dBA increase) would result in a significant degradation of the noise environment; and
- that a clearly noticeable change (a 5 dBA increase) in the noise environment, even though the acceptability threshold has not been reached, is considered a substantial increase and would result in a significant impact under CEQA.

(2) Land Use Compatibility Standards. In addition to the types of noise increases listed above, exposure of the proposed land uses to noise levels that exceed the City-designated "normally acceptable" limits identified in Table 43 for those uses would also constitute a *significant adverse noise impact*.

(3) Construction Noise. Noise peaks generated by construction equipment could result in temporary disturbance (e.g., speech interference) to persons in adjacent residences if the noise level in the interior of the building exceeds 45 to 60 dBA.¹ A typical building can reduce noise levels by 15 to 25 dBA with the windows closed,² although the actual noise attenuation may vary depending on building construction and design. This noise reduction could be maintained only on a temporary basis in some cases, since it assumes windows must remain closed at all times. Assuming a 15 to 25 dBA reduction with the windows closed, an exterior noise level of 70 to 75 dBA at receptors would maintain an acceptable interior noise environment for normal conversation. It should be noted that such noise levels would be sporadic rather than continuous in nature because different types of construction equipment would be used throughout the construction process.

¹In indoor noise environments, the highest noise level that permits relaxed conversation with 100% intelligibility throughout the room is 45 dBA. Speech interference is considered to become intolerable when normal conversation is precluded at 3 feet, which occurs when background noise levels exceed 60 dBA (U.S. Environmental Protection Agency. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Condensed Version), 1974).

²U.S. Environmental Protection Agency. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Condensed Version), 1974.

In outdoor environments, speech interference criteria are lower because no attenuation effects by buildings are available. Normal speech at a distance of one meter (about 3.3 feet) generates about 62 dBA. With an interfering sound level of 60 dBA with similar spectral characteristics as speech, a person normally (unconsciously) adjusts his/her speech effort to provide adequate communication. Noise levels exceeding 60 dBA in an otherwise quiet area would interfere with normal conversation and could be considered significant. This criterion is typically applied to recreational uses (e.g., playing fields, picnic areas, etc.) where speech communication is required.

b. Impacts and Mitigation Measures

NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.

Impact N-1: Construction Equipment Noise Impacts on Offsite Uses. During project construction, temporary noise increases would result from the operation of heavy equipment. This noise could disturb residents of housing located immediately adjacent to the project site in the Prominence subdivision, representing a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

Construction noise levels would fluctuate depending on construction phase, equipment type and duration of use, distance between noise source and receptor, and presence or absence of barriers between noise source and receptor. Construction noise sources range from about 78 to 81 dBA at 50 feet for compressors and generators to about 85 to 89 dBA at 50 feet for scrapers, backhoes, pavers, and jackhammers. Since pile driving would not occur, higher construction noise levels of 101 dBA at 50 feet would be avoided. However, if rock cannot be removed by any other method than blasting, temporary noise impacts from blasting would result. Temporary noise impacts from any required blasting would be minimal assuming micro-blasting techniques and blasting blankets would be used. Blasting would involve one or two blasting events over a short period (a few hours) and such brief events would occur on a sporadic basis (when small mounds of rock are encountered and can only be removed by blasting). The rate of attenuation is approximately six decibels (dBA) for every doubling of distance from a point source. Average near-field noise levels (noise levels at 50 feet from the noise source) for typical construction equipment are shown below in Table 46. Such average noise levels could result in temporary disturbance (e.g., speech interference) of any adjacent or nearby uses if the interior noise level is raised so that it exceeds 45 to 60 dBA.

Residences located west of Fairview Avenue and adjacent to the Fairview Avenue/Hayward Boulevard intersection are located immediately adjacent to the project site and would be directly affected by project construction activities. Residences on Fairview Avenue are located as close as approximately 160 feet to the proposed development boundary for project residences in Neighborhood A. Development would occur at elevations above these existing residences, which would be directly exposed to construction noise. At this distance,

Table 46
TYPICAL AVERAGE CONSTRUCTION NOISE LEVELS

<u>Equipment</u>	<u>Noise Level (dBA) at 50 Feet</u>	<u>With Feasible Noise Control¹</u>
Front Loader	79	75
Scraper	88	80
Backhoe	85	75
Dozer, Tractor	80	75
Grader	85	75
Paver	89	80
Concrete Mixer	85	75
Concrete Pump	82	75
Crane	83	75
Pump	76	75
Generator	78	75
Compressor	81	75
Jack Hammer	88	75
Pneumatic Tools	86	80
Saw	78	75
Vibrator	76	75

SOURCE: U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971. Washington D.C.

¹ Estimated levels obtainable by selecting quieter procedures or machines and implementing noise-control features requiring no major redesign or extreme cost.

construction noise levels could reach 66 to 79 dBA without noise controls. In addition, residences north of the Fairview Avenue/Hayward Boulevard intersection are located as close as approximately 130 feet from the development boundary for the proposed school. At this distance, construction noise levels could reach 68 to 81 dBA without noise controls. Based on the speech interference criterion described above (under "a. Significance Criteria"), construction-related noise levels would be unacceptable.

Mitigation N-1: Require the applicant to incorporate conditions in project construction agreements that stipulate conventional construction-period noise and dust abatement measures. These measures would reduce project construction-period noise to a *less-than-significant level*.

With the following controls, construction noise levels at adjacent residences would be 65 to 70 dBA during construction of Neighborhood A, and 67 to 72 dBA during construction of the onsite school, which would be acceptable.

- (a) **Construction Scheduling.** Limit noise-generating construction activities to daytime, weekday (non-holiday) hours (8:00 AM to 5:00 PM).
- (b) **Construction Equipment Mufflers and Maintenance.** Fit motorized equipment with proper mufflers in good working order. Maintain all construction equipment, particularly those powered by internal combustion engines.
- (c) **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines.
- (d) **Equipment Location and Shielding.** Locate all stationary noise-generating construction equipment such as air compressors as far as practical from existing nearby residences, and enclose all stationary sources within temporary sheds where located within 100 feet of existing or future residential and school uses.
- (e) **Quiet Equipment Selection.** Use hydraulically or electrically powered impact tools (e.g., jack hammers, pavement breakers, and rock drills) wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools.
- (f) **Noise Disturbance Coordinator.** Designate a project construction supervisor as "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site.

Impact N-2: Construction Equipment Noise Impacts on Future Onsite Uses.

Ongoing project construction noise could disturb project residents, representing a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

Project development is proposed to occur in phases with the golf course, some residential development and the school planned for the first phase. Once the school and residential uses are occupied, they would become sensitive receptors to construction of subsequent phases of project construction. School buildings would be located as close as 100 feet to Hayward Boulevard and 250 feet to the development boundary of Neighborhood A. At these distances, construction-related noise levels could exceed remain below the speech interference criterion (see "a. Significance Criteria" above). Effects on future project residents would depend on the proximity of construction activities to a particular receptor (i.e., the location of a subsequent phase that is under construction relative to occupied residences), but construction-related noise levels would be unacceptable if construction activities occurred within approximately 150 to 250 feet, depending on the type of equipment being used. Feasible noise controls would be required to maintain acceptable noise levels at future occupied residences.

Mitigation N-2: Implement *Mitigation N-1*. This measure would reduce the impact to a ***less-than-significant level***.

Impact N-3: Construction Truck Noise Impacts. During project construction, residences located along Hayward Boulevard would be subject to noise increases from increased truck traffic that would be associated with project-related equipment and materials deliveries, representing a ***potentially significant impact*** (see category (3) under "a. Significance Criteria" above).

(a) Construction Traffic Impacts. Truck noise levels depend upon vehicle speed, load, terrain and other factors. At slow speeds (25 to 30 mph), one truck makes the same level of noise as would be generated by 80 cars. At freeway speeds, one truck generates the same noise level as ten cars.¹

The effects of potential truck noise intrusion depend on the level of background noise already occurring at a particular receptor site. In quiet noise environments or during quieter times of the day, truck noise is mainly a single-event disturbance because, although the hourly average associated with short single events is not very high, individual noise peaks of 80 to 85 dB are common during a truck passage. Thus, in quiet noise environments (L_{eq} averaging 50 dBA), one truck would be noticeable. However, in noisy environments or during less

¹Caltrans, *Noise Technical Analysis Notes*, 1989 (from Calveno reference energy mean emission levels [REMELs]).

noise-sensitive hours, truck noise is perceived as part of the total noise environment rather than as an individual disturbance. In these slightly noisier environments (L_{eq} averaging 60 dBA), the threshold level is higher and it would take 10 trucks per hour to noticeably increase the noise exposure. In moderately noisy environments (L_{eq} averaging 70 dBA), the noise increase would be perceptible with the addition of 100 trucks per hour.¹

(b) Project Construction Truck Traffic. Since the project grading is proposed to be balanced on-site, there would be no major increases in haul trucks along Hayward Boulevard or Fairview Avenue. It is anticipated that 15,000 cubic yards of specialized sand would be imported for the golf course, requiring approximately 1,500 truck trips to the site for delivery. Assuming this sand is delivered over one six-month construction season (about 130 work days), an average of 12 truck trips per day (or two trucks per hour over six hours) would occur. However, it is likely that sand would be delivered in stages; on some days there would be no sand deliveries, while on other days, truck deliveries would be greater than 12 trips per day or two trucks per hour.

Noise measurements taken along Hayward Boulevard indicate that existing ambient noise levels are between 55 and 60 dBA (L_{eq}). Although truck noise would not significantly increase ambient noise levels, disturbance of residents living along the upper section of Hayward Boulevard (where noise levels are 55 L_{eq}) would most likely result if truck volumes approached or exceeded the 10-trucks/hour threshold. Limiting the hours of haul truck operation and the hourly volume of haul trucks would reduce the potential for such disturbance.

Mitigation N-3: Require project-related delivery and haul truck operations on offsite access roads to be limited to the daytime, weekday (non-holiday) hours (8:00 AM to 5:00 PM). Require the project construction agreement to limit the hourly truck volume for deliveries to less than 10 per hour. These measures would reduce the impact to a *less-than-significant level*.

¹Derived from Caltrans, *Noise Technical Analysis Notes*, 1989.

Impact N-4: Project and Cumulative Traffic Noise. Traffic from the proposed project and other development on Walpert Ridge would generate noise increases of more than 5 dBA on Hayward Boulevard and Fairview Avenue. These noise levels could disturb residents living along these roads. The noise increase and associated disturbances represent a **significant impact** (see categories (1) and (2) under "a. Significance Criteria" above).

(a) Traffic Noise Increases. Using noise modeling techniques specified by the Federal Highway Administration (FHWA-RD-77-108 with updated California Vehicle Noise Emission [CALVENO] factors) and traffic data prepared by Barton-Aschman Associates (see section IV.D, Transportation, of this SEIR), incremental noise increases due to the Walpert Ridge development (including the project) are estimated. Noise modeling results are presented in Table 47, which lists noise levels that would result from future traffic increases that are anticipated by 2010 with and without Walpert Ridge development under the three road network scenarios: With the Route 238 Bypass, With Partial Bypass (Stage 1), and Without Bypass. On Fairview Avenue near the project site, future noise levels with Walpert Ridge development would be expected to increase by 6 to 8 dBA (depending on whether the bypass is completed) over both existing levels and over 2010 levels without Walpert Ridge development. On Hayward Boulevard near the project site, future noise levels with Walpert Ridge development would be expected to increase by 7 to 9 dBA (depending on whether the bypass is completed) over both existing levels and over 2010 levels without Walpert Ridge development. Such noise increases would be considered significant (see "a. Significance Criteria" above). As indicated in Table 47, Walpert Ridge-related noise increases would decrease with distance from the site, with less-than-significant increases (less than 3 dBA) over 2010 levels without Walpert Ridge development occurring on Fairview Avenue just south of East Avenue and on Hayward Boulevard west of Farm Hill Road.

Since traffic generated from the proposed project alone would account for approximately 80 percent of the projected peak hour increases on local roadways, the project would also be responsible for at least 80 percent of projected noise increases along local roadways (which are based on daily volumes). The project's proportionate share of the noise increase would be equivalent to approximately 5 to 6 dBA on Fairview Avenue and 6 to 7 dBA on Hayward Boulevard. Therefore, the noise increases from the project alone would be significant (see "a. Significance Criteria" above).

Future traffic increases on Hayward Boulevard and Fairview Avenue (in 2010 without the project) would result in noise increases of 1 to 5 dBA over existing noise levels (see Table 47). When Walpert Ridge-related noise increases of 6 to 8 dBA are added to these cumulative increases, future noise levels along these roadways are estimated to reach 65 to 67 dBA (CNEL) at 50 feet, depending on the road network. The proposed project would be responsible for 80 percent of this increase. The City of Hayward *Noise Element* noise contour maps for current (1977) and future (1997) conditions indicate noise levels of 65 dBA (L_{dn}) at 50 feet from the centerlines of Fairview Avenue and Hayward Boulevard. Projected noise

Table 47

ESTIMATED EXISTING AND FUTURE NOISE LEVELS

Road Link	Distance to Centerline	Estimated CNEL Noise Level (in dBA)						
		Existing	2010 Without Walpert Ridge Development			2010 With Walpert Ridge Development		
			With Bypass	With Partial Bypass	No Bypass	With Bypass	With Partial Bypass	No Bypass
Fairview Ave. (North of Project)	50 ft.	57.6	58.6	58.7	59.1	64.7	64.9	65.6
Fairview Ave. (South of East Ave.)	50 ft.	58.6	62.0	62.1	63.2	64.2	64.4	65.7
Hayward Blvd. (West of Project)	50 ft.	57.5	58.7	58.8	59.2	66.7	66.6	66.1
Hayward Blvd. (West of Farm Hill Rd.)	50 ft.	64.0	66.4	66.3	65.7	68.7	68.6	67.8
Project Main Entry Road (East of Entry Gate)	125 ft.	--	--	--	--	60.3	60.2	60.1

SOURCE: Orion Environmental Associates, 1997.

levels for Fairview Avenue (with Walpert Ridge Development) would be consistent with these noise contour maps, but noise levels along Hayward Boulevard would be 1 to 4 dBA higher than shown on the *Noise Element* noise contour maps.

(b) Land Use Compatibility. When the City's noise compatibility guidelines for new residential uses are applied to existing residences, future noise levels at 50 feet from Hayward Boulevard and Fairview Avenue would worsen from "*normally acceptable*" to "*conditionally acceptable*". However, conventional construction with closed windows and fresh air supply systems or air conditioning would provide adequate noise attenuation to maintain acceptable interior noise levels of 45 dBA (CNEL or L_{dn}) in the future at residences located adjacent to these two roadways. Assuming all residences within approximately 200 feet of the centerline of Hayward Boulevard have fresh air supply systems or air conditioning, acceptable future interior noise levels would be maintained even with Walpert Ridge development. Windows on these homes would have to remain closed in order to maintain acceptable interior noise levels, however.

City noise compatibility standards indicate that the maximum acceptable outdoor noise level for residential uses is 60 dBA (CNEL or L_{dn}). This noise standard would apply to usable outdoor areas, such as backyards. Existing homes that have backyards along Fairview Avenue or Hayward Boulevard typically have masonry walls or wood fencing that enclose their yards. Since these walls can reduce traffic noise levels by 5 to 10 dBA (depending on wall height and the extent of elevational changes), future outdoor noise environments could generally be maintained at acceptable levels. However, two to four Prominence subdivision residences located on Hayward Boulevard that do not have a masonry wall but are within 130 to 140 feet of the roadway centerline (depending on the roadway network) would have outdoor noise environments that exceed the 60-dBA noise compatibility standard (see "a. Significance Criteria" above).

Mitigation N-4: No feasible mitigation is available for reducing project and cumulative traffic on Fairview Avenue and Hayward Boulevard, and noise attenuation (through installation of sound walls or mechanical ventilation) at affected existing residences would not be within the authority of the City or applicant. Project and cumulative traffic noise would therefore remain a ***significant unavoidable impact***.

To reduce the incremental noise increase, project- and Walpert Ridge-related traffic would need to be reduced on Fairview Avenue and Hayward Boulevard. This could be accomplished by providing an alternative access to the project site; this would not be a feasible mitigation, however.

Alternatively, provision of noise walls or mechanical ventilation in affected residences to achieve interior noise levels of 45 dBA (CNEL) and exterior noise levels of 60 dBA (CNEL) in backyards would be necessary to mitigate the project's impacts to a less-than-significant level. This would primarily affect two to four Prominence subdivision residences located on Hayward

Boulevard that are located within 130 to 140 feet of the roadway centerline and do not have perimeter barriers to reduce outdoor noise levels in backyards, probably because a noise wall could block views from their yards. View preservation and noise protection could be accomplished using barriers partly constructed of glass or transparent plastic, but implementation of this mitigation would have to be the prerogative of the owners. There are also 10 to 15 residences that front onto Hayward Boulevard (near Plumas Court) where acceptable interior noise levels may not be achievable without mechanical ventilation; the project sponsor would have to provide mechanical ventilation in those homes (at the owners' discretion) if they do not already have such ventilation.

Impact N-5: Project Compatibility with the Future Onsite Noise Environment.

Housing units in Neighborhoods B, C, D, and E could be constructed within 50 feet of the project's main entrance road, and the proposed onsite school buildings would be located as close as 100 feet to the main entrance road, creating the potential for traffic noise problems in these areas. This is a **potentially significant impact** (see category (2) under "a. Significance Criteria" above).

(a) Proposed Residential Uses. Proposed lots in Neighborhood A would be located as close as 100 feet to the centerline of the project's main access road. As indicated in Table 47, future estimated noise levels along this roadway would be 61 dBA (L_{dn}) at 100 feet, which would slightly exceed levels considered to be "*normally acceptable*" for residential development based on City noise compatibility guidelines. No noise attenuation measures would be needed in project residences in this neighborhood, since a 1-dBA exceedance level is within the limits of model accuracy.

In Neighborhoods B, C, D, and E, located farther south along the project's main entrance road, homes adjoining the roadway would be set back approximately 50 feet from the roadway centerline. At 50 feet, noise levels could reach 64 dBA (L_{dn}) depending on ultimate daily traffic levels along this section of the access road, which would be "*conditionally acceptable*" for residential development based on City noise compatibility guidelines. Depending on the height and type of walls/fencing proposed along lot boundaries adjacent to the main access road and ultimate traffic levels on each section of this road, additional noise attenuation measures could be required to reduce outdoor noise levels to acceptable levels where residential lots are located within 100 feet of the centerline of the main access road.

(b) Proposed School Use. School buildings would be located as close as 100 feet to Hayward Boulevard and the project's main entrance road. At this distance, future traffic noise levels at the school building could reach 63 to 64 dBA (L_{dn}). City noise compatibility guidelines for schools indicate that noise levels up to an L_{dn} of 70 dBA are considered "*normally acceptable*" but also "*conditionally acceptable*" between 60 and 70 dBA (see Table 43). Therefore, noise attenuation measures could be required.

The school playground would contain playing fields south of the school buildings, where the fields would be protected from traffic noise. Since the playing fields would be located at least 250 feet from Hayward Boulevard and the main entrance road, noise levels would be less than 59 to 60 dBA (L_{dn}), which would be acceptable for playground/park uses based on City noise compatibility guidelines.

(c) *Proposed Recreational Uses.* Traffic and residential activities would be the primary noise sources at the golf course and the tennis/swim club. Since the golf course and tennis/swim club are located away from the main entrance road and most onsite roadways, ambient noise levels at these facilities would be within acceptable levels when compared with City noise compatibility guidelines.

The proposed clubhouse for the golf course would be located south of Neighborhoods C and E. Decks are proposed on the east and west sides, and the western deck would be located as close as approximately 250 feet from project residences. Potential sources of noise at the clubhouse would be golf course loudspeakers and amplified music at the proposed restaurant. Noise data collected at another golf course indicate that loudspeakers could generate noise peaks of 62 dBA at 500 feet when in use. If the proposed restaurant has outdoor dining on the decks, noise levels of 65 to 69 dBA at 250 feet could be generated if amplified music is played. Since these noise peaks would be generated sporadically, they would not increase ambient (24-hour) noise levels above the maximum acceptable level for residential uses (60 dBA L_{dn}). However, the loudspeakers and any amplified music could be audible at project residences depending on the sound system design and placement as well as the type of backyard fencing that is developed at residences.

At the proposed tennis and swim club, project residential lots are proposed as close as 160 feet from the pool and 50 feet from the tennis courts. Noise data collected at a playground with 60 children playing (generally comparable to the noise generated by children playing in a pool) indicate that noise levels of 58 dBA at 160 feet could be generated by the pool at the closest residential lot boundary. Tennis courts can generate noise levels of 52 to 56 dBA for ball strikes and 53 to 57 dBA for voices at 100 feet. Since these noise levels would be generated sporadically, they would not increase ambient (24-hour) noise levels above the maximum acceptable level for residential uses (60 dBA L_{dn}). While voices could be audible occasionally at the closest residences, they would not result in any significant noise compatibility problems since these noise levels would be generated only during the daytime and evening hours, avoiding the more noise-sensitive nighttime hours (10:00 PM to 7:00 AM).

Mitigation N-5: Require a detailed analysis of noise reduction requirements for project residential neighborhoods located closer than 100 feet from the project's main access road. If found to be necessary, this analysis should provide required wall heights and design to achieve acceptable noise levels in usable outdoor spaces (60 dBA L_{dn}) and any supplemental noise insulation features to achieve acceptable indoor noise levels on second stories of homes (45 dBA L_{eq}). In addition, require a detailed analysis of noise reduction requirements for the onsite school, and require noise attenuation measures to reduce interior noise levels to 45 dBA L_{eq} between the hours of 7:00 AM and 5:00 PM. These measures would reduce the impact to a ***less-than-significant level***.

Although other noise compatibility problems are considered to be less-than-significant, it is also recommended that the following measures be incorporated into the project design to minimize the potential for future conflicts:

- Loudspeakers at the golf clubhouse should be directed away from residences and placed only on the south side of the building if possible. No loudspeakers should be allowed at the tennis and swim club.
- Amplified music in outdoor areas should only be allowed on the south side of the building, away from project residences.

Project Noise Impacts on Offsite Uses. The project residential, school, and recreational uses would have the potential to create noise compatibility problems for offsite uses. This is a ***less-than-significant impact*** (see category (2) under "a. Significance Criteria" above).

(a) Proposed Residential Uses. Noise generated by project residential activities would be similar to noise generated by residential activities in offsite areas. Therefore, the presence of the new project homes would not be expected to result in significant adverse noise impacts on existing residents in the area.

(b) Proposed School Use. The proposed elementary school and playground would generate daytime noise that, during peak recreational use, may reach levels as high as 60 to 65 dBA (L_{eq}) at 100 feet from the center of the activity. The closest noise-sensitive receptors to the playground (existing Prominence subdivision residences and four project residences in Neighborhood A) are located a minimum of approximately 500 feet away. At this distance, school-related noise levels would not exceed daytime ambient noise levels of 50 to 60 dBA (L_{eq}) in this area. In addition, school buildings would be located between the playing fields and residential receptors, further reducing noise generated on the playground. Therefore, no noise compatibility problems would be anticipated by development of the proposed school.

(c) Proposed Recreational Uses. Noise generated by project recreational activities (golf, swimming, tennis) would be located primarily in the central and southern portions of the site

away from existing adjacent development. Therefore, the proposed residential and recreational uses would not result in significant adverse noise impacts on existing offsite uses.

Mitigation for Project Noise Impacts on Offsite Uses. No significant impacts have been identified; no mitigation is required.

J. AIR QUALITY

The following section describes the impacts of the project on local and regional air quality. The chapter has been prepared using methodologies and assumptions recommended in the impact assessment guidelines of the Bay Area Air Quality Management District.¹ In keeping with these guidelines, this section describes existing air quality conditions, the project's construction-related air quality impacts, the project's long-term operational air quality impacts at both the local and regional scale, and mitigation measures to reduce or eliminate identified significant impacts.

1. SETTING

a. Air Basin Characteristics

The project site is located in Alameda County, which is in the San Francisco Bay Area Air Basin (herein referred to as "Bay Area"). The Bay Area climate is Mediterranean in character, with mild, rainy weather from November through March, and warm, dry weather from June through September. Northwest winds and westerly winds are most common in Hayward. Persistent subsidence inversions occur frequently over the Bay Area, especially during fall and winter, and act to restrict vertical dispersion of pollutants released near ground level. Topography can also restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The project site is located in gently-sloped terrain in the Hayward Hills. The combined effects of moderate ventilation, frequent inversions, and restrictive terrain give Hayward a moderate atmospheric potential for pollution.

b. Ambient Standards and Existing Air Quality

The Mulford-Carrell Act of 1969 and the Clean Air Act Amendments of 1970 established state and federal air quality standards for several pollutants. These standards are divided into primary standards designed to protect the public health, and secondary standards intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance and other forms of damage. The current state and federal standards are summarized in Table 48.

Table 49 provides a four-year summary of monitoring data from the closest air quality monitoring stations operated by the BAAQMD. The Hayward monitoring station measures a

¹Bay Area Air Quality Management District. BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans. April 1996.

Table 48

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

<u>Pollutant</u>	<u>Averaging Time</u>	<u>Federal Primary Standard</u>	<u>State Standard</u>
Ozone (O ₃)	1-Hour	0.12 ppm	0.09 ppm
Carbon Monoxide (CO)	8-Hour	9 ppm	9.0 ppm
	1-Hour	35 ppm	20 ppm
Nitrogen Dioxide (NO ₂)	Annual	0.05 ppm	--
	1-Hour	--	0.25 ppm
Sulfur Dioxide (SO ₂)	Annual	0.03 ppm	
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour		0.25 ppm
Particulates (PM ₁₀)	AAM/AGM	50 µg/m ³	30 µg/m ³
	24-Hour	150 µg/m ³	50 µg/m ³
Lead (Pb)	30-Day Average	--	1.5 µg/m ³
	3-Month Average	1.5 µg/m ³	--

SOURCE: California Air Resources Board, *Fact Sheet 39*. Revised November 1991.

AAM: Annual Arithmetic Mean (federal)

AGM: Annual Geometric Mean (state)

ppm: parts per million

µg/m³: micrograms per cubic meter

Table 49

SUMMARY OF AIR QUALITY DATA FOR HAYWARD, FREMONT AND OAKLAND 1992-1995

<u>Pollutant</u>	<u>Standard</u>	<u>Station</u>	<u>Days Above Standard:</u>			
			<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
Ozone	Federal 1-hour	Hayward	1	0	0	2
		Fremont	0	1	0	2
		Oakland	0	0	0	0
	State 1-hour	Hayward	1	0	1	7
		Fremont	5	5	4	10
		Oakland	0	1	0	1
PM ₁₀ ¹	Federal 24-hour	Fremont	0	0	0	0
	State 24-hour	Fremont	4	3	3	1
Carbon Monoxide	Fed./State 8-Hour	Oakland	0	0	0	0
		Fremont	0	0	0	0

SOURCE: California Air Resources Board, California Air Quality Data, Annual Summary, Vols. XXIV-XXVII, 1992-1995.

¹ Monitored only every six days (approximately 61 samples per year). Multiply "Days Above Standard" by 6 to estimate the actual "Days Per Year Above Standard," if measurements were made every day.

single pollutant, ozone. The closest multi-pollutant monitoring sites are located in downtown Oakland and Fremont. Data are shown for the years 1992-1995. Table 49 compares measured pollutant concentrations with state ambient air quality standards, which are more stringent than the corresponding federal standards.

(1) Ozone (O_3). State O_3 standards are regularly exceeded in parts of the Bay Area and, therefore the Bay Area is a "non-attainment" area for the state standard for O_3 . O_3 is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving hydrocarbons (HC) and nitrogen oxides (NO_x). O_3 is a regional air pollutant because its precursors are transported and diffused by wind concurrently with O_3 production by the photochemical reaction process. Motor vehicles account for approximately 40 percent of the O_3 precursors emitted in the Bay Area.¹

O_3 causes eye and respiratory irritation, reduces resistance to lung infection, and may aggravate pulmonary conditions in persons with lung disease. Table 49 shows that exceedance of the state standard occurred on seven days in Hayward in 1995, preceded by exceedance on only one day in 1994 and 1992. Exceedance of the less stringent federal standard of 0.12 ppm for one hour occurred on two days in 1995 in Hayward, according to published data.

(2) Carbon Monoxide (CO). Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels, and its main source in the Bay Area is automobiles. High levels of CO can impair the transport of oxygen in the bloodstream and thereby aggravate cardiovascular disease and cause fatigue, headaches, and dizziness. Table 49 shows that no exceedances of state CO standards were recorded between 1992 and 1995. Measurements of CO show low baseline levels with the hourly maximum averaging less than 50 percent of the allowable California standard. Similarly, maximum 8-hour CO levels are 3 to 4 parts per million (ppm) below their allowable 8-hour exposure.

(3) Inhalable Particulates (PM_{10}). PM_{10} consists of inhalable particulates that can cause adverse health effects. Demolition, construction, and vehicular traffic are major sources of particulates in urban areas. PM_{10} can include certain substances, such as sulfates and nitrates, that can cause lung damage directly, or can contain absorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Table 49 shows that exceedances of the state PM_{10} standard occur relatively frequently in Alameda County. PM_{10} concentrations in Hayward would be expected to be similar to those measured in Fremont.

¹Association of Bay Area Governments (ABAG) and the Bay Area Air Quality Management District (BAAQMD). Improving Air Quality Through Local Plans and Programs. October 1994.

(4) Other Criteria Air Pollutants. The standards for nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead are being met in the Bay Area, and the latest pollutant trends information suggests that these standards will not be exceeded in the foreseeable future.¹

c. Attainment Status and Regional Air Quality Plans

Regulation of air quality is achieved through both federal and state ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS, herein referred to as the national standards) for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), inhalable or respirable particulate matter (PM₁₀), and lead. These six pollutants are called "criteria air pollutants" because they satisfy the standards criteria specified in the federal CAA.

In the Bay Area, regulation of sources of air pollution is divided between a state agency, the California Air Resources Board, and a regional agency, the Bay Area Air Quality Management District (BAAQMD). The Air Resources Board is responsible for establishing state ambient air quality standards and motor vehicle emission standards for regulation of area sources, such as consumer products and pesticide use. The BAAQMD is primarily responsible for regulating industrial sources located within the Bay Area, and also provides information and recommendations to local governments concerning proposed development projects.

(1) Federal Air Quality Program. EPA classifies Air Basins (or portions thereof) as either "attainment" or "non-attainment" for each criteria air pollutant, based on whether or not the national standards have been achieved. In 1995, the U.S. Environmental Protection Agency (EPA) redesignated the San Francisco Bay Area Air Basin as an "attainment" area for ozone under the NAAQS (the basin was formerly designated a "non-attainment" area for this pollutant). The Bay Area Air Quality Management District (BAAQMD) has applied to the U.S. EPA for attainment status for carbon monoxide since none of the regional monitoring stations has recorded an exceedance of the national standard since 1991. However, the Bay Area has not yet been granted official federal designation as an attainment area with respect to carbon monoxide.

Under the federal Clean Air Act, air quality attainment plans for non-attainment areas must be prepared to document how standards will be met within specified timeframes. Regions that have attained air quality standards still must demonstrate how they will maintain compliance with the federal standards in future years. The current federal plans for the Bay Area include a Maintenance Plan for ozone that demonstrates how the Bay Area intends to maintain its new

¹ Association of Bay Area Governments (ABAG) and the Bay Area Air Quality Management District (BAAQMD). Improving Air Quality Through Local Plans and Programs. October 1994.

"attainment" designation), and an Attainment Plan for carbon monoxide.¹ For inhalable particulate matter (PM₁₀), the basin is "unclassified" at present. Revision of particulate standards to include only ultra-small diameter particulates are currently under consideration.

(2) State Air Quality Program. The State of California has established its own set of ambient air quality standards (herein referred to as "state standards") that are generally more stringent than their national counterparts. In 1988, California passed the California Clean Air Act (1988 Act) which, like its federal counterpart, called for designations of areas as "attainment" or "non-attainment" (but in reference to state standards). In 1994, the Bay Area air basin was redesignated as an attainment area for the state carbon monoxide standard. However, the Bay Area has been designated as "non-attainment" for state standards for O₃ and PM₁₀.

The 1988 Act also requires non-attainment areas to develop air quality plans that contain strategies to attain state air quality standards. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods, or provide for adoption of "all feasible measures on an expeditious schedule." The state Act also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures (TCMs) including measures to encourage or require the use of ridesharing or flexible work hours, or other measures that reduce the number or length of vehicle trips.

For this purpose, the *1991 Clean Air Plan* ('91 CAP) was developed for the Bay Area.² The plan proposes the imposition of controls on stationary sources (e.g., factories, power plants, industrial sources) and TCMs designed to reduce emissions from automobiles. Since the plan does not provide for a five-percent annual reduction in emissions, it proposes the adoption of "all feasible measures on an expeditious schedule." Recently, an update to the '91 CAP was prepared (the *Bay Area '94 Clean Air Plan*) that contains additional control strategies to improve regional air quality.³ Attainment of the state ozone standard in the Bay Area has not yet occurred, since emissions reductions as required by the Clean Air Plan are partially offset by new emissions from population and industry growth in the basin. The Clean Air Plan will be updated in 1997.

¹Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District (BAAQMD), Metropolitan Transportation Commission. Redesignation Request and Maintenance Plan (Maintenance Plan) for the National Ozone Standard. September 1993; Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District (BAAQMD), Metropolitan Transportation Commission. Attainment-Contingency Plan for the National Carbon Monoxide Standard. September 1993.

²Bay Area Air Quality Management District (BAAQMD). 1991 Clean Air Plan. October 1991.

³Bay Area Air Quality Management District (BAAQMD). Bay Area '94 Clean Air Plan. December 1994.

d. Sensitive Receptors

Land uses such as schools, children's day care centers, hospitals, and convalescent homes are considered to be more sensitive to poor air quality than other uses because the population groups associated with these uses are generally more susceptible to respiratory distress. Persons engaged in strenuous work or exercise are also more sensitive to poor air quality. Residential areas are considered more sensitive to air quality conditions compared to commercial and industrial areas because people generally spend longer periods of time at their residences, with associated greater exposure to ambient air quality conditions. Recreational uses are also considered more sensitive than commercial and industrial uses due to the greater exposure to ambient air quality conditions. Sensitive receptors in the project site vicinity include residential uses to the northwest of the site (along Hayward Boulevard and Fairview Avenue) and recreational uses associated with Garin Regional Park.

2. IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC AREA PLAN EIR

Table 50 summarizes air quality impacts and mitigation measures identified in the 1991 EIR. In general, the 1991 EIR found that the project would result in significant short-term increases in PM₁₀ levels during construction. This impact was identified as mitigated by implementation of recommended dust control measures and phasing construction to avoid overlapping construction schedules.

The 1991 EIR also identified significant increases in criteria air pollutants due to project-related traffic increases. Projected emissions exceeded BAAQMD significance thresholds that were in effect at that time for CO, NO_x, HC, and PM₁₀, and the 1991 EIR identified significant and unavoidable regional air quality impacts for both the 700- and 900-unit development alternatives. Significance thresholds that were in effect were 150 pounds per day (lbs/day) for HC, NO_x, SO₂, and PM₁₀, and 550 lbs/day for CO. Thresholds have since been lowered for HC, NO_x, and PM₁₀ to 80 lbs/day.¹

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

The proposed project would affect air quality both directly and indirectly. The direct effects of development would be related to new residential combustion sources such as fireplaces, water heaters, and space heaters and residential evaporative emissions caused by cleaners, solvents and surface coating applications (paint, stains, etc.).

¹Bay Area Air Quality Management District. BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans. April 1996.

Table 50

1991 EIR AIR QUALITY IMPACT AND MITIGATION FINDINGS

Impact Summary

Construction of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5 would produce an estimated 249 tons of suspended particulate matter (PM₁₀) per month of construction activity.

Traffic from the 700-unit development would generate regional emissions of about 1,341 pounds per day of carbon monoxide (CO), 158 pounds per day of nitrogen oxides (NO_x), 123 pounds per day of hydrocarbons (HC), 218 pounds per day of PM₁₀, and 20 pounds per day of sulfur dioxide (SO₂).

Traffic from the 900-unit alternative would generate regional emissions of about 1,725 pounds per day of CO, 203 pounds per day of NO_x, 159 pounds per day of HC, 280 pounds per day of PM₁₀, and 26 pounds per day of SO₂.

With development of 700 or 900 units, increases in O₃, HC, and CO emissions from project-generated traffic would not conform with the 1982 Air Quality Plan.

Mitigation Summary

Control construction dust by sprinkling unpaved construction areas at least twice a day; covering stockpiled materials; covering trucks hauling dirt and debris; sweeping up dirt or debris spilled onto paved surfaces; requiring construction contractors to designate a person or persons to oversee the dust control program; and phasing construction to avoid overlapping construction schedules. In addition, to reduce other air emissions during construction, maintain and operate construction equipment to minimize exhaust emissions, and shut off engines when trucks are loading, unloading, or waiting.

To reduce operational air quality impacts, encourage the use of carpools, van pools, and public transit; encourage transit use; and provide interconnected pedestrian and bicycle paths.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

The indirect effects of development would be related to vehicle use. Vehicles associated with the project would affect both local air quality (through changes in traffic volumes and congestion levels on the local street network) and regional air quality (by generating additional regional vehicle use).

The findings of this SEIR compare with those of the 1991 EIR as follows:

- The significant and unavoidable impact determination for construction period PM_{10} and NO_x in this analysis differs from the 1991 EIR findings, which determined that the significant PM_{10} increases were mitigable and NO_x emissions were less than significant. The 1991 EIR determined that PM_{10} emissions were mitigable because it assumed that recommended measures such as appropriate construction phasing would be implemented to maintain acceptable PM_{10} levels. However, such phasing is not feasible under the current project proposal, in which mass grading is proposed. The 1991 EIR also did not quantitatively analyze exhaust emissions, most likely because sufficient construction phasing information was not available at that time.
- The less-than-significant local air quality impact determination in this SEIR analysis is consistent with the 1991 EIR findings.
- The significant and unavoidable impact determination for regional air quality impacts in this SEIR analysis is consistent with the 1991 EIR findings, which determined that regional air quality impacts were significant and unavoidable.

a. Significance Criteria

Appendix G of the CEQA Guidelines establishes that a project will normally have a *significant impact* on air quality if it will:

*violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.*¹

For the purposes of this SEIR, a significant impact on local air quality is defined as a predicted violation of the carbon monoxide ambient air quality standards due to project-related traffic increases on the local street network. For regional air quality, a significant impact is defined as an increase in emissions of an ozone precursor or PM_{10} exceeding the BAAQMD's recommended thresholds of significance. The BAAQMD recommends various thresholds and tests of significance.² For HC, NO_x and PM_{10} , a net increase of 80 pounds per day (lbs/day)

¹CEQA Guidelines, Appendix G, Item x.

²Bay Area Air Quality Management District. BAAQMD CEQA Guidelines. April 1996.

is considered significant. For CO, an increase of 550 lbs/day of CO would be considered significant if it leads to a possible local violation of CO standards (i.e., a "hot spot").

b. Impact and Mitigation Measures

NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.

Impact AQ-1: Construction Period PM-10 Emissions. Construction activities associated with the proposed project would generate short-term emissions of criteria pollutants that include suspended or inhalable particulate matter (including the respirable fraction known as PM₁₀, particles 10 microns or less in diameter) and equipment exhaust emissions. PM₁₀ emissions would exceed the BAAQMD significance threshold, representing a **short-term significant impact** (see "a. Significance Criteria" above).

(a) Proposed Grading. The project site would develop approximately 574 acres of the 1,635-acre site with recreational, residential, school, and park uses as well as for roads. Project construction would occur in two phases, with mass grading of the 574 acres proposed for development occurring during the first phase. It is anticipated that mass grading would occur over one or two construction seasons. In addition to mass grading, the first phase would include construction of the school, some of the homes, all (18 holes) or half (nine holes) of the golf course, and all or a portion of the roads. The golf clubhouse and tennis/swim facility may or may not take place during the first phase. The second phase would consist of construction of the remainder of the homes and roadway, and the golf/tennis facilities if they were not constructed during the first phase. Homes would be constructed in 100-home increments with the timing dependent on market demand.

Proposed mass grading of the development areas would generate fugitive dust, which includes the respirable fraction known as PM₁₀. The largest dust particles would be expected to settle out within the construction areas, but some quantities of dust would be advected beyond the construction site toward adjacent land uses. The prevailing winds would generally carry dust emissions in a west-to-east direction, away from existing receptors located west of the project site. Construction dust particles typically settle near their sources and are efficiently filtered by human breathing passages. Although the smallest particles can enter deep lung tissue, they have a low irritant response because they are chemically or biologically benign. There is a slightly increased health risk from breathing such benign dust due to small amounts of active microorganisms in soil, but the risk factor is low. Dust is, therefore, more of a nuisance as it settles out on parked cars, outdoor foliage and furniture rather than a measurable health risk.

(b) Potential Dust Generation. Potential generation of dust or total suspended particulates (TSP) can be estimated by utilizing the universal construction dust generation factor (which assumes no dust control measures) of 110 pounds of TSP per day per acre. While the

project sponsor proposes to mass grade approximately 574 acres of the site at one time, dust generation would only occur in those areas where earthmoving activities are occurring at any given time. Assuming approximately 10 percent of the development area would be subject to earthmoving activities on any given day, disturbance of 57 acres could generate as much as 6,270 lbs/day of TSP. The respirable fraction (PM_{10}) of TSP is approximately 50 percent, while implementation of standard dust control measures typically achieves a 50 to 75 percent reduction in TSP emissions. Therefore, the project would generate approximately 3,135 lbs/day of PM_{10} , which well exceeds the BAAQMD's 80 lbs/day significance threshold for PM_{10} . With implementation of dust control measures, PM_{10} generation could be reduced to between 600 and 1,200 lbs/day, which is still well in excess of the significance threshold. Therefore, even with implementation of maximum dust control measures outlined by the BAAQMD, the significant emissions of PM_{10} could not be reduced to a less-than-significant level.

This high projected emission of PM_{10} can be attributed to the large areal extent of grading that is proposed to occur at one time. Grading would have to occur in six-acre increments with maximum dust control measures implemented in order to maintain PM_{10} generation at levels just below the BAAQMD significance threshold. Since it would not likely be feasible to grade the development area in six-acre increments, the project's short-term construction-related PM_{10} emissions are considered *significant and unavoidable* even with implementation of mitigation measures (see "a. Significance Criteria" above).

Mitigation AQ-1: Require project construction contractors to implement the BAAQMD dust control measures during all phases of project construction. The extent to which each group of measures shall be implemented would depend on future project phasing and the extent of surface disturbance at any one time. Implementation of these measures would reduce project emissions, but could not reduce project emissions to a less-than-significant level during the first two years of construction. Therefore, the project's construction-related increases in PM_{10} emissions would remain a ***significant, unavoidable impact***.

The following BAAQMD measures are recommended:

(a) Basic Control Measures. The following Basic Control Measures shall be implemented at all construction sites:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose debris *or* require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.

- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

(b) Measures for Construction on More Than Four Acres. In addition to the above, the following enhanced control measures shall be implemented at all construction sites when more than four acres are under construction at any one time:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

(c) Measures for Construction on More Than 10 Acres. In addition to the above, the following measures shall be also implemented at all construction sites when site disturbance exceeds 10 acres:

- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour.
 - Limit the area subject to excavation, grading and other construction activity at any one time.
 - Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
 - Install wind breaks or plant trees/vegetative wind breaks on the windward side(s) of construction areas, if practically feasible.
-

Impact AQ-2: Short-Term Construction Equipment Exhaust Impacts. Equipment exhaust emissions during construction would result from vehicular traffic generated by the construction activities, including automobiles transporting workers to and from the project site, and from construction equipment and machinery. Nitrogen oxide (NO_x) emissions would exceed the BAAQMD significance threshold, representing a ***short-term significant impact*** (see "a. Significance Criteria" above).

Similar to dust emissions, exhaust emissions from construction equipment would be related to the size of the project and extent of earthmoving requirements. Since the first two years would be the most intensive grading effort associated with the project and would result in the highest equipment exhaust emissions, it is assumed that maximum exhaust emissions would occur in 250 workdays and that 200,000 brake-horsepower-hours (BHP-HR) of equipment operations would be required per acre developed as part of the project. If all on-site equipment were diesel-powered, the following average daily emissions would be generated:

Carbon Monoxide	230 lbs/day
Reactive Organic Gases	73 lbs/day
Nitrogen Oxides	1,043 lbs/day
Sulfur Oxides	73 lbs/day
Exhaust Particulates	36 lbs/day

These calculations indicate that during the first two years of construction, nitrogen oxides (NO_x) emission could exceed the BAAQMD significance threshold of 80 lbs/day. Even with requirement of periodic low-NO_x tune-ups as mitigation, NO_x emissions would still exceed this threshold. Therefore, the project's short-term construction-related equipment exhaust emissions would be *significant and unavoidable* even with implementation of recommended mitigation measures (see "a. Significance Criteria" above). After completion of the first two phases of the project, most earthmoving activities would be completed and exhaust emissions would decrease, limited to equipment operation for construction of homes in 100-home increments.

Mitigation AQ-2: Require project construction contractors to implement exhaust reduction measures during all phases of project construction. Implementation of these measures would reduce project emissions, but could not reduce project emissions to a less-than-significant level. Therefore, the project's construction-related increases in PM₁₀ emissions would remain a ***significant, unavoidable impact***.

The following measures are recommended:

- (a) Use alternatively fueled mobile and stationary construction equipment wherever feasible. Use low sulfur fuels for all other equipment.

- (b) Maintain properly tuned equipment by performing low-NO_x tune-ups on all construction equipment. Contractors should be required to utilize equipment with recent (within 30 days) low-NO_x tune-ups to minimize NO_x emissions. This would apply to all diesel-powered equipment greater than 50 horsepower and periodic tune-ups (every 90 days) would be required for equipment used continuously for project construction.
- (c) Wherever feasible, utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
- (d) Employ construction activity management techniques, such as:
 - extending construction period and limiting the hours of operation of heavy duty equipment and/or the amount of equipment in use;
 - reducing the number of pieces used simultaneously;
 - limit idling time (e.g., five minutes maximum) of all construction equipment;
 - increasing the distance between emission sources;
 - develop a trip reduction plan to achieve 1.5 AVR (Average Vehicle Ridership) for construction employees.

Project and Cumulative Impacts on Long-Term Local Air Quality. With the addition of emissions from project and cumulative (Walpert Ridge development) traffic, local air pollutant levels would remain below state and federal significance thresholds. Project and cumulative traffic emissions would therefore represent a ***less-than-significant impact*** on local air quality (see "a. Significance Criteria" above).

On the local scale, the pollutant of greatest interest is carbon monoxide. Concentrations of this pollutant are related to the levels of traffic and congestion along streets and at intersections.

The BAAQMD-recommended screening procedure based upon the CALINE-4 computer simulation model was applied to seven selected intersections in the project vicinity to estimate future carbon monoxide levels in the area without and with Walpert Ridge development (including the proposed project). Future levels were projected assuming three road network scenarios: With Bypass, With Partial Bypass (Stage 1), and Without Bypass. The intersections modeled were selected as those where the delay (level of service) was most affected by Walpert Ridge-related traffic increases. Selected intersections are: (1) Fairview Avenue/Future Five Canyons Parkway/East Avenue, (2) Fairview Avenue/Oakes Drive, (3) Fairview Avenue/Hayward Boulevard, (4) Hayward Boulevard/Farm Hill Boulevard, (5) Hayward Boulevard/Civic Drive, (6) Hayward Boulevard/Campus Drive, and (7) Soto Road/Orchard Avenue.

The results of the CALINE-4 modelling for the seven selected intersections are shown in Table 51 for AM peak hour traffic and Table 52 for PM peak hour traffic. Predicted future one-hour concentrations are to be compared to the state standard of 20 parts per million (ppm) and the federal standard of 35 ppm. Predicted eight-hour concentrations in Tables J-4 and J-5 are to be compared to the state and federal standard of 9 ppm.

Existing concentrations shown in Table 51 indicate that CO levels are below the state and federal standards at selected intersections. Future (2010) CO concentrations (without Walpert Ridge development) are not expected to differ substantially from current levels due to increasingly stringent emission control programs for automobiles, which will balance any effects of greater traffic volumes or increased congestion. Walpert Ridge-generated traffic would increase concentrations by up to 2.4 ppm for the one-hour averaging time and up to 1.5 ppm for the eight-hour averaging time, but levels would still remain below the state and federal standards. Project-related traffic would comprise 80 percent of these incremental increases. The anticipated project-related and cumulative (Walpert Ridge development) impacts on local air quality would therefore be considered *less-than-significant* (see "a. Significance Criteria" above).

Mitigation for Project and Cumulative Impacts on Long-Term Local Air Quality. No significant impacts have been identified; no mitigation is required. Nevertheless, the roadway improvements recommended in Section IV.D (Transportation) of this SEIR would be expected to reduce traffic congestion and associated long-term local air quality impacts associated with project-related vehicular emissions.

Impact AQ-3: Project and Cumulative Impacts on Long-Term Regional Air Quality. Emissions from project and cumulative development would cause regional air pollutant levels to exceed BAAQMD significance thresholds for CO, ROG, NO_x, and PM₁₀. This would be a *significant impact* (see "a. Significance Criteria" above).

Trips to and from the project would result in added air pollutant emissions affecting the entire San Francisco Bay air basin. Regional emissions associated with Walpert Ridge development vehicle use (including the project) have been calculated using the BAAQMD-recommended methodology URBEMIS and EMFAC7F emission factors.

The estimated incremental daily mobile emissions associated with Walpert Ridge-related traffic are shown in Table 53 for criteria pollutants including reactive organic gases (ROG) and NO_x, both precursors of ozone (O₃). Daily point-source emissions associated with proposed residential uses, including dispersed and intermittent emissions from space and water heaters, household paints and solvents, fireplaces and woodstoves, lawn mowers and other equipment, are also included in projected emissions presented in Table 53. Since the

Table 51

PROJECTED AM PEAK HOUR CARBON MONOXIDE CONCENTRATIONS NEAR MAJOR INTERSECTIONS WITH AND WITHOUT CUMULATIVE (WALPERT RIDGE) DEVELOPMENT (IN PARTS PER MILLION)

	Intersection						
	<u>Fairview/East/ Five Canyons</u>	<u>Fairview/ Oakes</u>	<u>Fairview/ Hayward</u>	<u>Hayward/ Farm Hill</u>	<u>Hayward/ Civic</u>	<u>Hayward/ Campus</u>	<u>Soto/ Orchard</u>
<i>One-Hour Averaged Concentrations</i>							
Existing (1997)	4.2	4.1	*	4.4	7.8	5.8	5.4
No Walpert Ridge - With Bypass (2010)	3.0	2.9	2.8	3.0	4.7	3.7	3.3
Walpert Ridge Dev. - With Bypass (2010)	3.0	2.9	2.8	3.0	4.7	3.7	3.9
No Walpert Ridge - With Partial Bypass (2010)	3.0	2.9	2.8	3.0	4.7	3.7	3.9
Walpert Ridge Dev. - With Part. Bypass (2010)	3.3	3.1	3.3	4.2	7.1	4.8	4.3
No Walpert Ridge - Without Bypass (2010)	3.3	3.1	3.3	4.2	7.1	4.8	6.6
Walpert Ridge Dev. - Without Bypass (2010)	3.6	3.2	3.3	3.4	6.6	4.2	4.9
<i>Eight-Hour Averaged Concentrations</i>							
Existing (1997)	2.8	2.8	*	2.9	5.0	3.8	3.5
No Walpert Ridge - With Bypass (2010)	2.0	2.0	1.9	2.0	3.0	2.4	2.2
Walpert Ridge Dev. - With Bypass (2010)	2.0	2.0	1.9	2.0	3.0	2.4	2.6
No Walpert Ridge - With Partial Bypass (2010)	2.0	2.0	1.9	2.0	3.0	2.4	2.3
Walpert Ridge Dev. - With Part. Bypass (2010)	2.2	2.1	2.2	2.7	4.5	3.1	2.8
No Walpert Ridge - Without Bypass (2010)	2.2	2.1	2.2	2.7	4.5	3.1	4.2
Walpert Ridge Dev. - Without Bypass (2010)	2.4	2.1	2.2	2.3	4.2	2.7	3.2

SOURCE: Orion Environmental Associates, 1997.

*Since there are currently only two legs of this intersection, these two legs operate as a through road rather than an intersection.

Table 52

PROJECTED PM PEAK HOUR CARBON MONOXIDE CONCENTRATIONS NEAR MAJOR INTERSECTIONS WITH AND WITHOUT CUMULATIVE (WALPERT RIDGE) DEVELOPMENT (IN PARTS PER MILLION)

	Intersection						
	<u>Fairview/East/ Five Canyons</u>	<u>Fairview/ Oakes</u>	<u>Fairview/ Hayward</u>	<u>Hayward/ Farm Hill</u>	<u>Hayward/ Civic</u>	<u>Hayward/ Campus</u>	<u>Soto/ Orchard</u>
<i>One-Hour Averaged Concentrations</i>							
Existing (1997)	4.1	4.1	*	4.3	5.1	5.6	6.0
No Walpert Ridge - With Bypass (2010)	2.9	2.9	2.8	3.0	4.9	3.4	3.5
Walpert Ridge Dev. - With Bypass (2010)	2.9	2.9	2.8	3.1	4.9	3.4	3.6
No Walpert Ridge - With Partial Bypass (2010)	3.0	2.9	2.8	3.0	3.8	3.4	3.9
Walpert Ridge Dev. - With Part. Bypass (2010)	3.4	3.1	3.5	3.5	7.2	4.0	4.3
No Walpert Ridge - Without Bypass (2010)	3.4	3.1	3.5	3.7	7.0	4.0	6.9
Walpert Ridge Dev. - Without Bypass (2010)	5.8	3.3	3.5	3.4	6.5	3.9	4.7
<i>Eight-Hour Averaged Concentrations</i>							
Existing (1997)	2.8	2.8	*	2.9	3.4	3.7	3.9
No Walpert Ridge - With Bypass (2010)	2.0	2.0	1.9	2.0	3.2	2.3	2.3
Walpert Ridge Dev. - With Bypass (2010)	2.0	2.0	1.9	2.1	3.2	2.3	2.4
No Walpert Ridge - With Partial Bypass (2010)	2.0	2.0	1.9	2.0	2.5	2.3	2.6
Walpert Ridge Dev. - With Part. Bypass (2010)	2.3	2.1	2.3	2.3	4.5	2.6	2.8
No Walpert Ridge - Without Bypass (2010)	2.3	2.1	2.3	2.4	4.4	2.6	4.4
Walpert Ridge Dev. - Without Bypass (2010)	3.7	2.2	2.3	2.3	4.1	2.6	3.0

SOURCE: Orion Environmental Associates, 1997.

*Since there are currently only two legs of this intersection, these two legs operate as a through road rather than an intersection.

Table 53

EMISSIONS (IN POUNDS/DAY) FROM CUMULATIVE (WALPERT RIDGE) DEVELOPMENT

<u>Pollutant</u>	<u>EMFAC Emissions Factors (grams/mile)</u>	<u>Daily Emissions (lbs/day)</u>	<u>Significance Threshold (lbs/day)</u>	<u>Exceeds Threshold?</u>
CO	8.00	1,163.4	550	Yes
ROG	0.59	85.8	80	Yes
NO _x	0.88	128.0	80	Yes
SO _x	0.03	4.4	n/a	n/a
PM ₁₀	0.83	120.1	80	Yes

SOURCE: Orion Environmental Associates, 1997.

ROG = Reactive Organic Gases
NO_x = Nitrogen Oxides
PM₁₀ = Inhalable Particulate Matter, particle size of 10 microns or less
SO_x = Sulfur Oxides
neg. = negligible

Trip Generation Assumptions:	Residential SF Detached	650 Units	5,590 daily trips
	Residential SF Detached	155 Units	1,870 daily trips
	Elementary School	650 Students	350 daily trips
	Tennis Club	8 Courts	30 daily trips
	Golf Course	18 Holes	260 daily trips
	Restaurant	6,000 s.f.	230 daily trips
	Parks	10 acres	20 daily trips
	Total		8,350 "net" new trips

Total Vehicle Miles Traveled: 8,350 miles x 7.9 miles/trip = 65,965

proposed project would comprise 80 percent of projected Walpert Ridge-related peak hour traffic, 80 percent of the projected Walpert Ridge-related emissions are attributable to the proposed project.

As discussed in "a. Significance Criteria" above, BAAQMD guidelines for the evaluation of project impacts consider emission increases to be significant if they exceed 80 lbs/day for HC, NO_x and PM₁₀. The estimated Walpert Ridge-related emissions shown in Table 53 would exceed these criteria for CO, ROG, NO_x, and PM₁₀. Since the project comprises 80 percent of these emissions, project-related emissions would also exceed BAAQMD significance criteria for the same pollutants except ROG. When the project is considered by itself, ROG emissions would not exceed the significance threshold. However, the project would contribute to cumulative emissions which result in the ROG significance threshold being exceeded. Therefore, the project would result in individually and cumulatively significant regional air quality impacts, and these impacts are considered *significant and unavoidable* since there are no feasible mitigation measures which could reduce emissions to less-than-significant levels.

Mitigation AQ-3: Implement BAAQMD-recommended measures for reducing motor vehicle emissions. With implementation of these measures, the project and cumulative effect on regional air quality would remain a ***significant, unavoidable impact***.

Significant and unavoidable long-term regional air quality impacts have been identified. Mitigation measures for reducing motor vehicle emissions from residential projects are outlined and quantified by the BAAQMD.¹ However, the measures that could possibly be implemented as part of the proposed project would not reduce significant project-related or cumulative emissions to less-than-significant levels. These measures would be as follows:

- (a) To encourage alternative modes of transportation for internal project- or Walpert Ridge-related trips, provide sidewalks, bicycle paths, and possibly golf cart paths to provide internal connections between planned residences and the school, golf clubhouse, and tennis/swim club. (Effectiveness: 0.1 - 1 percent of all trips)
- (b) Provide gas stub-outs on all fireplaces in project residences. Residential fireplaces are a source of PM₁₀ and carbon monoxide emissions, and such emissions could be reduced if residences used gas to more effectively burn wood or used gas logs instead of wood.
- (c) Provide neighborhood-serving shops and services within the proposed project. (Effectiveness: 1 - 4 percent of all trips)
- (d) Depending on the future demand within the project, provide satellite telecommute centers and shuttle service to major destinations (such as employment centers or shopping

¹Bay Area Air Quality Management District. BAAQMD CEQA Guidelines. April 1996. Table 16.

centers) or regional transit systems/multimodal centers. (Effectiveness: 0.1 - 1.5 percent of all trips)

The feasibility of Measures (c) and (d) above is uncertain since the provision of commercial retail, satellite telecommute, or shuttle services would depend on market demand. In addition, City regulations currently do not allow development of commercial retail uses in the project area. Additional measures recommended by the BAAQMD relate to provision of transit facilities or connection of bicycle facilities that connect to community-wide network. These measures may not be feasible since transit service in the project vicinity is limited and the area's hilly topography would ultimately limit the effectiveness of connecting project bicycle paths to the community network.

K. CULTURAL RESOURCES

This cultural resources section describes the value and significance of identified onsite or nearby prehistoric and historic resources, the potential for project disturbance of any identified onsite or nearby resources, and measures warranted to mitigate identified impacts.

This section is based on the 1991 Walpert Ridge Specific Area Plan EIR and supporting studies and two recently-prepared supplemental reports for the East Bay Regional Park District and Roman Catholic Bishop properties. The Walpert Ridge Specific Area Plan EIR prepared in 1991 includes an archaeological resources section with findings based on the following reports: (a) Cultural Resources Review for the Walpert Ridge Project, Hayward, California, April 12, 1985 and "Analysis of Preferred Alternative October 11, 1985, by David Chavez & Associates, prepared under contract to ESA; (b) An Archaeological Reconnaissance of a 2,500-Acre Parcel on Walpert Ridge, Alameda County, California, 1978, prepared by George R. Miller, et al.; (c) Mitigation Plan for Cultural Resources: The Ridge, Hayward, California, by Northern California Research and Planning Associates; and (d) Cultural Resources Investigation for the Bailey Ranch EIR, Alameda County, California, April 1990, prepared by David Chavez & Associates, prepared under contract to ESA. The two supplemental reports were prepared for the project applicant and include the Blue Rock Country Club Project East Bay Regional Park District Study Area Supplemental Cultural Resources Technical Report prepared by Ananian Associates, March 1997 and the letter report addendum to the March 1997 report dated April 21, 1997, and two letter updates from Ananian Associates dated May 22, 1997 and July 9, 1997. The April report addresses the Roman Catholic Bishop study area. This documentation is available for public review at the City of Hayward Department of Community and Economic Development, 25151 Clawiter Road.

1. SETTING

The project site consists of the 1,558-acre Hayward 1900 property, a 20-acre East Bay Regional Park District (EBRPD) property, and a 57-acre Roman Catholic Bishop property. Cultural resource documentation for these three properties is summarized below.

a. Hayward 1900 Property

(1) Identified Sites. As indicated in Table 54, the 1991 EIR determined that there were 16 cultural resources located on the existing 1,558-acre Hayward 1900 property, consisting of ten historic and six prehistoric resources. These resources include:

Table 54

PREHISTORIC AND HISTORIC RESOURCES--BLUE ROCK COUNTRY CLUB SITE

1978 Survey of 2,500 acres on Walpert Ridge¹ supplemented by 1988 mitigation plan²

Resources Found	Comments
1. Prehistoric Bedrock Mortar Milling Station (CA-Ala-396)	On Hayward 1900 property. Subsurface testing, consultation with local Native Americans, and recording completed in 1988; no mitigation required under CEQA, but it is recommended that it be preserved in open space (OS) or moveable boulders should be moved to a park or OS area.
2. Prehistoric Rock Art Site (CA-Ala-397)	On Hayward 1900 property. Site consists of the location of an incised rock tablet removed to CSU Hayward in 1978 and is currently curated there. No further mitigation required or recommended.
3. Prehistoric Bedrock Mortar Site (CA-Ala-398)	On Hayward 1900 property. Additional testing, consultation with local Native Americans, and recording completed in 1988; no further mitigation required or recommended.
4. Prehistoric Habitation Site (CA-Ala-399)	Further testing recommended in 1991 EIR. This site is located well outside the boundaries of the project site.
5. Prehistoric Bedrock Mortar Site (CA-Ala-400)	On Hayward 1900 property. Recorded in 1988; no further mitigation required, but it is recommended that bedrock mortars be moved to a park or OS area.
6. Historic Quarry Site (CA-Ala-401H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required, but it is recommended that several of the quarry stones be moved to a park or OS area.
7. Historic Quarry Site (CA-Ala-402H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required, but it is recommended that several of the quarry stones be moved to a park or OS area.
8. Historic Quarry Site (CA-Ala-403H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required, but it is recommended that several of the quarry stones be moved to a park or OS area.
9. Historic Quarry Site (CA-Ala-404H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required, but it is recommended that several of the quarry stones be moved to a park or OS area.
10. Historic Stone Structure (CA-Ala-405H)	On Hayward 1900 property. An evaluation by an architectural historian found that it does not qualify for National Register status; no further mitigation required or recommended.

¹An Archaeological Reconnaissance of a 2,500-Acre Parcel on Walpert Ridge, Alameda County, California, 1978, prepared by George R. Miller et al.

²Mitigation Plan for Cultural Resources: The Ridge, Hayward, California, 1988, prepared by Northern California Research and Planning Associates.

Resources Found	Comments
11. Historic Stone-lined Well (CA-Ala-406H)	On Hayward 1900 property. Stone structure was removed and replaced with a modern concrete well. Area was recorded; no further mitigation required or recommended.
12. Historic Rock Wall or Feature (CA-Ala-407H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required or recommended.
13. Historic Rock Wall or Feature (CA-Ala-408H)	On Hayward 1900 property. Location recorded in 1988; no further mitigation required or recommended.
14. Historic Rock Wall or Feature (CA-Ala-409H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required or recommended.
15. Prehistoric Food Processing or Bedrock Mortar Site (CA-Ala-410)	On Hayward 1900 property. Recorded in 1988; no further mitigation required or recommended.
16. Historic Rock Wall (CA-Ala-411H)	On Hayward 1900 property. Recorded in 1988; no further mitigation required or recommended.
17. Combined Prehistoric Bedrock Mortar and Historic Quarry Site (88-WRP-1)	On Hayward 1900 property. Recorded in 1988; no further mitigation required, but it is recommended that several of the bedrock mortars and quarry stones be moved to a park or OS area.

1990 Survey of Bailey Ranch Area of Walpert Ridge¹

18. Prehistoric Bedrock Mortar Site (CA-Ala-513)	Recorded in 1990; more precise recording is recommended; no additional measures are required.
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March 1997 Survey of East Bay Regional Park District Property²

19. Meincke Property Homestead--Historic Structures and at least one Prehistoric Bedrock Mortar	Formal recording recommended; no further mitigation required.
20. A Series of Prehistoric Bedrock Mortars	Formal recording recommended; no further mitigation required.
21. Historic Sandstone Quarry Pit with an Associated Stone Wall	Formal recording recommended; no further mitigation required.
22. Three Historic Stone Walls in one line	Formal recording recommended; no further mitigation required.

¹Cultural Resources Investigation for the Bailey Ranch EIR, Alameda County, California, April 1990, prepared by David Chavez & Associates.

²Blue Rock Country Club Project East Bay Regional Park District Study Area Supplemental Cultural Resources Technical Report, March 1997, prepared by Benjamin Ananian, M.A./S.O.P.A.

<u>Resources Found</u>	<u>Comments</u>
23. Historic sandstone Quarry Pit with an associated Stone Wall	Formal recording recommended; no further mitigation required.
24. Remains of Two Historic Sandstone Foundations and an Orchard planted with Eucalyptus and Olive Trees	Formal recording recommended; no further mitigation required.
25. Historic Honcharenko Homesite, including gravesites, orchard remains, stacked rock, a cave, and potential for subsurface deposits	Avoidance of and formal recording required.

April 1997 Survey of Roman Catholic Bishop Property¹

26. Historic Soda Property Homestead, including historic structures, stacked rock dam, early agricultural equipment and vehicles (WPR-10*)	Formal recording recommended; no further mitigation required.
27. Historic Sandstone Quarry (WPR-11)	Formal recording and removal of stones to a park or OS area recommended; no mitigation required.
28. A line of stacked stones (WPR-12)	Formal recording and removal of stones to a park or OS area recommended; no mitigation required.
29. A line of stacked stones (WPR-13)	Formal recording and removal of stones to a park or OS area recommended; no mitigation required.
30. One shallow, isolated Prehistoric Bedrock Mortar (WPR-14)	Formal recording and removal of stones to a park or OS area recommended; no mitigation required.

SOURCE: Wagstaff and Associates, 1997.

Note:

* All of the field designation numbers identified in the April 1997 report are temporary.

¹Letter Report Addendum to Blue Rock Country Club Project East Bay Regional Park District Study Area Supplemental Cultural Resources Technical Report, April 21, 1997, prepared by Benjamin Ananian, M.A./S.O.P.A.

- four rock walls (CA-Ala-407H, -408H, 409H, and 411H),
- five historical quarries (CA-Ala-401H, -402H, 403H, 404H, and 88-WRP-1),
- the site of a former historical stone well (CA-Ala-406H),¹
- a historical hand-hewn stone structure (CA-Ala-405H),
- three prehistoric bedrock mortar sites (CA-Ala-396, -400, and 410), and
- two rock art sites (CA-Ala-397 and -398).

In addition, as shown in Table 54, the adjacent Bailey property contains a prehistoric bedrock mortar site. One additional identified resource, a prehistoric habitation site (CA-Ala-399), is located well outside of the Hayward 1900 boundaries.

(2) Significance of Resources. Based on supporting reports and the 1991 EIR,² it was determined that the 16 sites on the Hayward 1900 property were not considered significant historic or prehistoric resources, but that they had research value that would be lost if they were destroyed without being recorded. These features were recorded in the 1988 mitigation plan prepared by Northern California Research and Planning Associates.

b. East Bay Regional Park District Property

(1) Identified Sites. In March 1997 Ananian Associates, under contract to the applicant, completed a cultural resources survey of the 20-acre portion of the project site owned by the East Bay Regional Park District (EBRPD). As indicated in Table 54, Ananian Associates discovered seven historic/prehistoric sites.

(2) Significance of Resources. One of the sites, the Honcharenko Homesite, is listed in the California Inventory of Historic Places³ and was determined to be a significant historic resource. Agapius Honcharenko was Ukrainian by birth and became a Greek Orthodox priest. Following publication of writings urging greater freedom for peasants, he was exiled by the Russian government. To escape persecution and to continue his political activism, Honcharenko fled to the United States and arrived Hayward in 1865. Honcharenko was influential in the acquisition of Alaska for the United States, was owner and editor of the Alaska Herald newspaper in San Francisco until 1872, and established the Holy Trinity

¹The stone structure was removed and replaced with a modern concrete well.

²Miller et al., 1978; Northern California Research and Planning Associates, 1988; and David Chavez & Associates, 1990.

³State of California, Department of Parks and Recreation, California Inventory of Historic Places, 1976.

Hellenic Chapel in New Orleans in 1895.¹ The home that once stood on the Honcharenko Homesite was demolished. The homesite includes family gravesites, the remains of an orchard, stacked rock, a cave where Agapius Honcharenko held services, and the potential for subsurface deposits.

Ananian Associates determined that the following remaining six sites on the EBRPD property do not have significant historic/prehistoric value based on Appendix G and K of the CEQA Guidelines:

- the Meincke homestead (located immediately offsite) containing historic structures (barn, feed shed, and privy), sandstone quarry, stone wall property line, windmill and water storage tank, early agricultural equipment, and at least one prehistoric bedrock mortar;
- a series of bedrock mortars in the streambed;
- a historic sandstone quarry located south of the Meincke homestead;
- three stone walls in one line;
- a sandstone quarry pit with an associated stone wall; and
- the remains of two quarried sandstone foundations and an orchard planted with eucalyptus and olive trees.

c. Roman Catholic Bishop Property

(1) Identified Sites and Isolates. In April 1997 Ananian Associates, under contract to the applicant, completed a cultural resources survey of the portion of the project site owned by the Roman Catholic Bishop. As indicated in Table 54, Ananian Associates discovered two historic sites and three historic isolates, including:

- Soda property homestead, including historic structures (barns, garage, tack shed, privy, corral), stacked rock dam, early agricultural equipment and vehicles (site WPR-10),²
- an additional sandstone quarry located south of the Meincke homestead (site WPR-11),
- two lines of stacked stones (isolates WPR-12 and -13), and
- one shallow, isolated bedrock mortar (isolate WPR-14).

¹Benjamin Ananian, Blue Rock Country Club Project East Bay Regional Park Study Area Supplemental Cultural Resources Technical Report, March 1997 and Hayward...the First 100 Years, Eden Writers, 1975, page 49.

²The field designation numbers for the resources found on the Roman Catholic Bishop property are temporary numbers assigned by Ananian Associates.

(2) Significance of Resources. Ananian Associates determined that none of the identified sites or isolates qualify as a significant resource based on Appendix G and K of the CEQA Guidelines:

2. IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC AREA PLAN EIR

Table 55 summarizes archaeological resource impacts and mitigation measures identified in the 1991 EIR.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Significance Criteria

Based on the CEQA Guidelines, the project would be considered to have a significant impact on cultural resources if it would:¹

- (1) eliminate important examples of the major periods of California history or prehistory;
- (2) disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as part of a scientific study;
- (3) result in an adverse physical or aesthetic effect to a prehistoric or historic building, structure, or object;
- (4) cause a physical change that would affect unique ethnic cultural values; or
- (5) have the potential to cause damage to an important archaeological resource as defined in Appendix I, items XIV.a-d of the CEQA Guidelines.

¹CEQA Guidelines, Section 15065(a); Appendix G, Item j; Appendix I, Items II.20.a-d; and Appendix K (III.A-E). Appendix K to the CEQA Guidelines recommends avoidance of a site, if feasible. If avoidance is not feasible, the site should be preserved. Preservation includes land uses that will avoid damage to the resources. If the site is to be preserved, significant ground disturbance shall be avoided and construction activity shall be monitored to preserve known resources and to determine the presence of any previously unknown resources. If preservation is not feasible, the resources can be removed and preserved pursuant to an excavation plan.

Table 55

1991 EIR ARCHAEOLOGICAL RESOURCE IMPACT AND MITIGATION FINDINGS

Impact Summary

Development of 700 or 900 housing units in the subarea within 1.5 miles of Fire Station No. 5 may disturb two historic structures located within the potential development area, and may also disturb four historic sites and two prehistoric sites located near the potential development area.

Mitigation Summary

Map, measure, and photograph all existing elements and artifacts to preserve information for future research by a qualified archaeologist.

Preserve prehistoric Native American sites.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

b. Impacts and Mitigation Measures

(1) Hayward 1900 Property. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Project Impacts on Less-Than-Significant Prehistoric and Historic Resources on the Hayward 1900 Property. The habitation site (CA-Ala-399) is, as discussed above, well outside of the proposed project boundaries and would not be affected by the project. The 16 resources identified within the Hayward 1900 property were recorded, and in some cases evaluated further, in the 1988 mitigation plan. None of these resources were determined to qualify as significant prehistoric or historic resources.

Mitigation for Project Impacts on Less-Than-Significant Resources. No significant impacts have been identified, and therefore, no mitigation measures are required. However, as indicated in Table 54, it is recommended that bedrock mortars and rocks from the following sites be preserved in a park or open space area or moved to such an area:

- Prehistoric Bedrock Milling Station (CA-Ala-396),
- Prehistoric Bedrock Mortar Site (CA-Ala-400),
- Historic Quarry Sites (CA-Ala-401H, -402H, and -404H), and
- Combined Prehistoric Bedrock Mortar and Historic Quarry Site (88-WPR-1).

Based on the proposed plan it appears that CA-Ala-396, -400, 404H, and 88-WPR-1 would be preserved in open space. Therefore, it appears that the only sites for which mitigation is recommended are sites CA-Ala-401H and -402H.

No mitigation measures are required, but more precise recording is recommended for prehistoric bedrock mortar site CA-Ala-513.

(2) East Bay Regional Park District Property. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Impact CR-1: Honcharenko Homesite. Although the project would not result in development of the Honcharenko Homesite, the project could adversely affect this historic site because access to the area would increase both during and after the construction phase of the project. During the construction phase of the project, staging of construction equipment and vehicles could disturb the site. After construction, the increase in public access afforded by the project to the homesite would increase the potential for vandalism. Such disturbance represents a ***potentially significant impact*** (see criteria #1-3 and 5 under "a. Significance Criteria" above).

As indicated in Table 55, based on the March 1997 and April 1997 archaeological surveys prepared by Ananian Associates, 12 additional cultural resources were identified onsite, one of which, the Honcharenko Homesite is considered significant pursuant to the National Register of Historic Places (36 CFR Section 60.4) and Appendix K of the CEQA Guidelines (Section III.A.2.D). The homesite is listed in the State of California Department of Parks and Recreation, California Inventory of Historic Places, March 1976.

Mitigation CR-1. (a) Permit the Honcharenko Home and Worship site to remain under the ownership and management of the East Bay Regional Park District; (b) avoid disturbance of the Honcharenko Homesite; and (c) in consultation and coordination with, and subject to approval by the EBRPD, record and conduct further onsite research necessary for recordation of the homesite, including mapping and photography following, at a minimum, the standard procedures of the California Department of Parks and Recreation, Office of Historic Preservation. These measures would reduce impact on the Honcharenko Homesite to a ***less-than-significant level***.

Project Impacts on Less-Than-Significant Prehistoric and Historic Resources on the East Bay Regional Park District Property. As discussed in the setting section, the remaining six of the seven resources identified on the EBRPD property do not have significant prehistoric or historic value, based on the criteria identified under "a. Significance Criteria" above. The project would therefore have a ***less-than-significant impact*** on these resources.

Mitigation for Less-Than-Significant Resources. Although the March 1997 cultural resources report regarding the EBRPD property prepared by Ananian Associates determined that six of the seven sites identified were less than significant in terms of their prehistoric or historic value, they recommended implementation of the following mitigation measure:

- (a) Relocate bedrock mortar rocks and quarry stones to a park or open space area if they are located in the direct line of development. However, it does not appear that these resources are located in areas to be developed under the proposed plan.

(3) Roman Catholic Bishop Property. *NOTE: The following impact and mitigation findings are intended to replace those identified in the 1991 EIR.*

Project Impacts on Less-Than-Significant Prehistoric and Historic Resources on the Roman Catholic Bishop Property. As discussed in the setting section, none of the historic resources (two sites and three isolates) identified on the Roman Catholic Bishop property have significant historic value, based on the criteria identified under "a. Significance Criteria" above. The project would therefore have a ***less-than-significant impact*** on these resources.

Mitigation for Less-Than-Significant Resources. Although the April 1997 cultural resources report regarding the Roman Catholic Bishop property prepared by Ananian Associates concluded that the two historic sites and the three historic isolates were less than significant in terms of their historic value, they recommended implementation of each of the following mitigation measures:

- (a) Formally record the sites and isolates.
- (b) Relocate bedrock mortar rocks and quarry stones to a park or open space area if they are located in the direct line of development. It appears that the Soda Property Homestead (WPR-10) and stacked stone (WPR-13) are located in an area planned for development; the remaining sites and isolates would be located in areas that would not be developed under the proposed plan.

L. ENERGY

The following section describes existing energy usage on the project site, identifies pertinent, energy-related goals and policies, describes criteria used to determine the significance of energy-related impacts, and identifies associated project impacts and mitigation needs.

For purposes of consistency and comparison, all energy use calculations in this section are presented in a common unit of measurement, the therm. A therm is a unit of heat energy equivalent to 100,000 British thermal units (BTUs), 29.29 kilowatt hours (kWh) of electricity, or about 0.80 gallons of gasoline (upon combustion).

1. SETTING

Existing onsite energy use is limited to insignificant amounts associated with the onsite housing unit (currently unoccupied) and grazing activity. Current transportation-related activity associated with these uses consists of automobile and farm equipment usage by ranchers.

2. IMPACT AND MITIGATION FINDINGS--1991 SPECIFIC AREA PLAN EIR

Table 56 summarizes energy impacts and mitigation measures identified in the 1991 EIR.

3. SUPPLEMENTAL IMPACT FINDINGS AND MITIGATION NEEDS

a. Significance Criteria

Based on the CEQA Guidelines,¹ the project would be considered in this EIR to have a *significant impact* on energy resources if it would:

- (1) encourage activities which result in the use of large amounts of fuel, water, or energy; [or] use fuel, water, or energy in a wasteful manner, or

¹CEQA Guidelines, Appendix G, Item n.

Table 56

1991 EIR ENERGY IMPACT AND MITIGATION FINDINGS

Impact Summary

Project grading and construction would result in a one-time expenditure of at-source Btus (approximately 1,075 billion Btus for a 700-unit development and approximately 1,218 billion Btus for a 900-unit development).

Project buildout would result in an annual consumption of energy for operation and transportation.

Mitigation Summary

Encourage the use of solar energy for space and water heating, and consider solar exposure, wind conditions, and shadow patterns, when siting buildings on lots.

Install energy-efficient appliances and install flow restrictors on sinks and showers.

Minimize the total amount of concrete and asphalt. Use light-colored architectural treatments on interior surfaces and skylights. Use low-sodium lamps for outdoor lighting.

Provide transit stops and interconnected pedestrian and bicycle paths.

The substantial amount of energy that would be committed for project area development and operations would represent a ***significant, unavoidable impact***.

SOURCE: Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report (Draft, February 22, 1991; and Final Addendum, May 17, 1991).

- (2) conflict with applicable environmental plans adopted by the agencies with jurisdiction over the project.

b. Impacts and Mitigation Measures

NOTE: The following impact and mitigation findings are intended to supplement those identified in the 1991 EIR.

The proposed project would result in substantial additional short- and long-term energy consumption increases. Short-term impacts would occur during project construction. Long-term impacts would occur during the life of the project. The approximate magnitude of such potential short-term and long-term impacts is described below.

Impact E-1: Energy Use from Project Construction. Construction-period energy consumption would total approximately 14 million therms. As identified in the 1991 EIR, energy use from project construction would be considered a *significant impact* (see Criterion #1 under "3. Significance Criteria" above).

Construction-period energy use would occur temporarily over the project's anticipated five- to six-year buildout period. Energy usage for construction can be calculated based on a typical average rate of ten therms per square foot of new building area, a rate that includes energy required to fabricate and transport construction materials to the site and energy to construct the proposed structures.¹

The 650 dwelling units proposed by the project would equal an estimated 1.3 million square feet of building area (assuming an average of 2,000 square feet per unit) and would therefore be expected to consume approximately 13 million therms of energy to construct. Construction of the approximately 87,400 square feet of proposed school and recreational space (golf clubhouse and swim/tennis club structures)² would be expected to consume approximately 874,000 therms of energy. The estimated total energy that would be required to construct the project would be approximately 13.9 million therms, plus that required for the construction of the golf course and project infrastructure.

¹California State Energy Commission (D.B. Goldstein and A. H. Rosenfeld), Conservation and Peak Power Cost Demand, 1975.

²The 87,400-square-foot total consists of the 12,360-square-foot golf clubhouse, the 13,548 clubhouse restaurant, the 6,700-square-foot swim/tennis club, and the 54,794-square-foot school (total square footage = 87,402).

Mitigation E-1: No addition mitigation is available beyond that identified in the 1991 EIR. Project construction would therefore have a ***significant, unavoidable energy impact***.

Impact E-2: Energy Use from Project Operations. At buildout, the residential, school, and recreational uses proposed by the project would use an estimated 958,000 therms of energy each year. As identified in the 1991 EIR, energy use from project operations would be considered a ***significant impact*** (see Criterion #1 under "3. Significance Criteria" above).

Table 57 lists estimated annual energy consumption by project land use. As shown in the table, operation of the project (not including vehicle trips, which are addressed below), would require approximately 958,000 therms of energy per year. The project residential units would consume energy for lighting, heating, cooling, ventilation, and cooking. The school and various project recreational uses (golf course, clubhouse, swim and tennis club) consume energy for lighting, heating, cooling, ventilation, water heating, and restaurant operations.

Mitigation E-2: In addition to the mitigation measures identified in the 1991 EIR, require the project to comply with Title 24 Energy Efficiency Standards and City of Hayward Design Guidelines regarding solar access. While these measures would reduce onsite energy consumption, the energy-related impacts of the project would remain a ***significant, unavoidable impact***, as identified in the 1991 EIR.

The City of Hayward Design Guidelines¹ contain the following provisions for solar access in site planning:

- Concentrate building on south- and east-facing slopes; avoid building in steep-walled canyons due to low solar exposure and extremes in temperature.
- Orient streets on an east/west axis to maximize solar access possibilities where compatible with topography and existing street pattern.
- Vary setbacks to provide good solar access where street orientation is not favorable. In Planned Developments, zero-lot-lines may permit buildings to abut the north property line, thereby providing the greatest possible yard area to the south of each building (see p. 22).
- Orient the long axis of a building east and west where consistent with other design considerations.

¹City of Hayward, Design Guidelines, adopted November 9, 1993, page 3.

Table 57

ESTIMATED ANNUAL ENERGY CONSUMPTION BY PROJECT LAND USE

Facility/Use	Given Size	Electricity Factor	Electrical Consumption		Natural Gas Factor	Gas Consumption		Total Annual Energy Consumption		Notes
			kWh/yr	Btu/yr (billions)		therm/yr	Btu/yr (billions)	therm/yr	Btu/yr (billions)	
Residential Units	650 units	7,350 kWh/unit	4,777,500	48.92	585 therms/unit	380,250	38.03	869,000	86.9	1, 2
Elementary School	55,000 SF	8 kWh/SF	440,000		21,866 Btu/SF		1.20	12,000	1.2	
Tennis and Swim Club				0.00						
convenience retail	5,000 net SF	15 kWh/SF	75,000	0.77	41,000 Btu/SF	0	0.21	10,000	1.0	3
tennis courts (6-8 @ 7,200 SF/ct)	8 courts	13,140 kWh/ct	105,120	1.08	0	0		11,000	1.1	4, 5
club facilities	4,325 gross SF	10 kWh/SF	43,250	0.44	27,333 Btu/SF	0	0.12	6,000	0.6	6
pool	1,425 SF	10 kWh/SF	14,250	0.15	27,333 Btu/SF	0	0.04	2,000	0.2	6
gym			0	0.00				0	0	
Golf Course Clubhouse										
clubhouse facility	12,000 net SF	10 kWh/SF	120,000	1.23	27,333 Btu/SF	0	0.33	16,000	1.6	
restaurant	6,000 net SF	38 kWh/SF	225,000	2.30	102,500 Btu/SF	0	0.62	29,000	2.9	7
pool	2,400 SF	10 kWh/SF	24,000	0.25	27,333 Btu/SF	0	0.07	3,000	0.3	6
SUBTOTAL								958,000	95.8	
Vehicle Trips	7,990 daily trips							1,133,000	113.3	8
TOTAL ENERGY CONSUMPTION								2,091,000	209.1	

SOURCE: EIP Associates (prepared for Hayward 1900)

Notes:

1 therm = 100,000 British thermal units (Btus)

1. Assumes residential mix proposed as part of project.

2. For above average-sized homes, energy consumption factors estimated to be about 15% more than factor of 6,383 kWh/yr per average household and 509 therms/yr per average household. These factors for residential uses are given in California Energy Commission, *Energy Efficiency Report*, October 1990, pp. 44, 45.

3. From factors given for commercial uses in California Energy Commission, *Energy Efficiency Report*, October 1990, pp. 58, 59.

4. De Chiara, Joseph and Koppelman, Lee E. *Site Planning Standards*, 1978.

5. Rau, John G., and Wooten, David C., *Environmental Impact Analysis Handbook*, 1980.

6. Consumption factors assumed to be 1/3 less than that of retail.

7. Energy consumption factors estimated to be about 2.5 times more than that of retail.

8. Vehicle energy use assumes eight miles average trip length and 18 miles per gallon average fuel efficiency, for 250 days per year.

Daily trips based on Table 4 (Project Trip Generation) of the *Site Traffic Analysis* (Barton-Aschman Associate, Inc., August 8, 1997), adjusted for smaller school, and without 155 units of cumulative development.

- Orient a sufficient amount of roof areas for roof collectors within 22.5° of south.
- locate buildings on lots so that the sun can reach the south wall and roof of each unit without obstruction.
- Site buildings so that their shadows do not cover plazas and sitting areas. Locate buildings on the north side of outdoor use spaces whenever possible, and shape the building mass to cast a minimum shadow.
- Site taller buildings to the north of shorter ones. Utilize portions of the site with poor solar access for service functions like parking.

In addition, the project construction design would be required to comply with Title 24 Energy Efficiency Standards set forth in the California Administrative Code. Compliance with the following measures would allow the project to meet or exceed these standards:

- Where possible given local terrain, streets should be oriented such that the principal streets are running primarily east/west. This orientation provides for optimum solar gain as well as the best shelter of streets from the winter west-northwesterly winds. Solar access to south-facing winter heating and shading of low morning and afternoon summer heat gain are the primary reasons for this guideline.
- Building orientation and solar access should be considered in choosing housing types. Application of passive solar technology in residential design suggests differing unit types for differing exposures. For example, the front facade of a north-facing home should be different from the home opposite it with full southern exposure.
- Residential and commercial buildings should use natural daylight. Residential and commercial buildings should provide at least 75 percent of their daytime lighting needs with natural daylighting. Possible technologies include interior light courts, clerestory windows, lightshelves (reflecting daylight onto light-colored surfaces), mirror systems, skylights, windows on at least two sides of every room in a house, and narrow floor plates in commercial buildings.
- Thermal mass, such as a concrete or tile floor or masonry wall, should be part of every residential unit's design as needed to meet Title 24 standards.
- Windows should not receive direct sunlight during the hours of 10:00 AM to 4:00 PM between March 21 and September 21. Walls and windows facing east, south and west generate a large portion of a building's cooling load. Shading these will greatly increase efficiency. Shading solutions, including architectural elements, movable awnings, trellises, deciduous vegetation, and adjacent buildings, should be considered in building design.
- Building designs should provide opportunities for winter sunlight. Structures or coniferous vegetation ("evergreens") should not shade any south-facing glazing or roof-top solar devices from 9:00 AM to 3:00 PM on December 21. Winter sun should

shine on the thermal mass within the unit. Solar water heaters and photovoltaic arrays are encouraged for business park rooftops.

- Single-family house designs should provide at least two outdoor living areas. Designs should include at least two outdoor living areas, one that is well shaded in the summer and one which remains sunny in winter. These can be left to be finished by the homebuyer, but they should be a defined part of the house plan and have doors opening onto them.

Fifty percent of any building's window area should feature operable windows and shading devices. Employees in commercial buildings should be able to control their environment.

- All buildings should contain insulation that conforms to Title 24. Caulking, insulation and weatherstripping is an inexpensive method for reducing unwanted air flows. Insulation in attics, ceilings, and exterior wall cavities help minimize air flows and heat transference.
- All buildings should contain high-efficiency lighting. All lighting fixtures permanently installed in housing units and commercial buildings should include high-efficiency bulbs. Possibilities include compact fluorescent, tube fluorescent, electronic bulbs, low voltage, and other emerging products. Energy-efficient lighting equipment, such as electronic ballasts, reduced-voltage lamps, high light efficiency fixtures, fixture lenses and reflectors, help reduce the amount of lighting energy required for a particular application. An estimated 35 to 50 percent of all electrical energy used in commercial, retail and institutional facilities is consumed by lighting. On/off controls, variable output controls and occupancy sensor controls are effective mechanisms for managing lighting needs.
- Mechanical equipment should be energy-efficient. Heating, ventilation, and air conditioning systems generally account for between 45 to 60 percent of the energy used in a typical commercial building. A wide variety of energy-efficient equipment is available. Incorporating energy-efficient technologies into commercial buildings can increase the buildings' value and marketability. PG&E also has cash incentive programs for builders using energy-efficient equipment. Energy-efficient water heaters, booster pumps and insulation of water pipes also help reduce overall energy costs.

Natural heating and cooling technology should provide a portion of the building's environmental management needs. Possible heating technologies include direct gain passive solar, active solar, trombe walls, and hybrid remote heat storage. Possible cooling technologies include passive and active solar, thermo-siphoning, underground cooling tubes, and ventilated cavities between two layers.

Impact E-3: Transportation-Related Energy Consumption. Unless the project provides for modes of transportation that offer viable alternatives to the automobile, the project would be expected to result in comparatively wasteful uses of transportation fuel, representing a ***potentially significant impact*** (see Criterion #1 under "3. Significance Criteria" above).

Transportation-related energy consumption would consist primarily of fuel for project-generated vehicular trips. As indicated in Table 57, the project-related transportation would be expected to consume approximately 1.1 million therms of energy per year, based on (a) an estimated average one-way trip length of eight miles, (b) average fuel consumption of 18.0 miles per gallon, and (c) an estimate of approximately 7,990 trips per day and 2.0 million trips per year (7,990 x 250 days/year).

Mitigation E-3: Require the applicant to (1) work with the City to obtain AC Transit agreement to extend bus service to the project site, and (2) provide for at least one bus stop near the project entry. Provide space at the golf clubhouse or other location for carpool or vanpool parking, as directed by the City. Require golf carts to be electrically operated instead of gasoline powered, if feasible based on site topography. Implement *Mitigation AQ-3* identified in the section IV.J, Air Quality, to reduce automobile trips. These measures would reduce the energy impact to a ***less-than-significant level***, provided that AC Transit is able to extend service to the site. If AC Transit is not able to serve the site, the unmet demand for transit service and resulting transportation fuel use by private vehicles would remain a ***significant unavoidable impact***.

Extension of transit service to the site would help the project to achieve compliance with the City of Hayward General Policies Plan policy to "*promote development patterns integrated with existing transit systems; promote transit, bike and pedestrian circulation.*"¹ Please refer to section IV.D for further discussion of project impacts on transit.

¹City of Hayward, General Policies Plan, Environmental Concerns policies, Strategy 1, page VIII-19.

V. PROJECT CONSISTENCY WITH ADOPTED PLANS AND POLICIES

V. PROJECT CONSISTENCY WITH ADOPTED PLANS AND POLICIES

The project site is located in the City of Hayward and is subject to review and approval by the Hayward Planning Commission and City Council. As warranted by state law, the policies set forth in the City of Hayward General Plan guide development review in the city.

Section 15125(b) of the CEQA Guidelines require EIRs to "...discuss any inconsistencies between the proposed project and applicable general and regional plans." The Guidelines indicate that the objective of the discussion is to provide information that will suggest ways to modify the project to reduce any identified inconsistencies with relevant plans and policies.

This SEIR chapter identifies project inconsistencies with the relevant goals and policies of the City of Hayward General Plan, the Walpert Ridge Specific Plan, the Hayward Area Recreation and Park District (HARD) Master Plan, and pertinent regional plans, including the Association of Bay Area Governments (ABAG) Proposed Land Use Policy Framework and the Bay Area Air Quality Management District (BAAQMD) Bay Area '91 Clean Air Plan.

A. CITY OF THE HAYWARD GENERAL PLAN

The City of Hayward General Plan consists of the following documents:

- the General Policies Plan (adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through July 27, 1993), which contains the *Land Use, Circulation, Open Space, and Recreation Elements* of the General Plan;
- the *Growth Management Element* (adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of December 14, 1993);
- the *Housing Element* (1990 Update, adopted July 31, 1990, as amended July 16, 1991);
- the *Conservation and Environmental Protection Element* (adopted March 22, 1977 and revised September 12, 1978);
- the *Noise Element Policies Document* (adopted July 26, 1977); and
- the Hayward Earthquake Study (*Seismic Safety Element*, adopted in April 1972).

The following discussion describes project inconsistencies with the relevant policies of these General Plan elements.

1. General Policies Plan

a. General Policies Plan Map. The General Policies Plan Map designates the portion of the project site within the *Urban Limit Line* as *Residential, Suburban Density (1.0 to 4.3 dwelling units per net acre)*. The project includes an application for amendment of the General Policies Plan Map to redesignate the portion of the project site within the *Urban Limit Line* as *Residential, Low Density (4.3 to 8.7 dwelling units per net acre)*. With City approval of this amendment, the project would be consistent with the General Policies Plan Map designation.

b. City Image Policies. The project has the potential to be inconsistent with the following policy and related strategies:¹

Policy: Natural features will be utilized to enhance the city image.

Strategy 7: Retain fingers of open space to define the ridges and canyons and connect open hill spaces to the Bay Plain.

Strategy 8: Require hill development to respect natural contours and to blend with natural vegetation.

The project would allow development of approximately 574 acres of existing hillside open space, with retention of approximately 1,000 acres as permanent open space. Implementation of mitigation measures recommended in section IV.B, Visual Factors, of this SEIR would assist in ensuring that project-proposed urban development is consistent with these strategies. It should be noted that the strategies represent a general policy direction that was further refined in the 1995 Walpert Ridge Specific Plan (see evaluation in section IV.B).

c. Circulation Policies. Without mitigation, the project has the potential to be inconsistent with the following policy and related strategies:²

Policy: A comprehensive approach will be taken in alleviating mounting problems of traffic congestion.

Strategy 9: Require new development to demonstrate that there will be adequate road capacity before approval or issuance of permits.

Strategy 10: Provide for new development to commit to project-related, off-site traffic mitigation measures as and when deemed necessary.

¹City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996, page II-15.

²City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996, pages III-13a and 13b.

As discussed in section IV.D (Transportation) of this SEIR, traffic from the project would result in future significant roadway system operational impacts. Section IV.D recommends intersection improvements and project fair-share contributions to these improvements. Implementation of these mitigation measures would eliminate the project-related inconsistency with this policy.

The project may also be inconsistent with the following policy-related strategy:¹

Policy: Alternatives to automobile transportation will be encouraged through development policies and provision of transit, bike and pedestrian amenities.

Strategy 5: Continue to require large developments to provide bus turnouts and shelters, and pedestrian access to transit stops.

The project as proposed does not contain provisions for transit stops. Implementation of mitigation measures recommended in sections IV.J (Air Quality) and IV.L (Energy) would assist in reducing project inconsistency with this strategy.

d. Housing and Neighborhood Preservation Policies. The project would not present any inconsistencies with these policies.

e. Economic Development Policies. The project would not present any inconsistencies with these policies.

f. Human Resources Policies. The project would not present any inconsistencies with these policies.

g. Open Space, Parks, and Recreation Policies. Without mitigation, the project has the potential to be inconsistent with the following policy and related strategies:²

Policy: The aesthetic, ecological, and recreational resources of the hills will be conserved.

Strategy 1: Implement plans for a continuous green belt from Lake Chabot to Garin Park with development policies that are coordinated with Alameda County, Hayward Area Recreation and Park District, East Bay Regional Park District, and other agencies.

¹City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996, page III-15.

²City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996; page VII-14.

Strategy 5: Design of development on Walpert Ridge and infill hill development shall reflect design sensitive to maintaining a natural hill environment; encourage maximum retention of natural topographic features such as drainage swales, streams, slopes, rock outcroppings and natural plan formations through site plan review.

Strategy 6: Seek clustering of development which maintains continuity of open space.

Strategy 9: Constrain unstable or steep slopes, wooded hillsides, and creekbanks from development.

The project proposes residential and golf course development in the Hayward hills. The project would preserve approximately 1,000 acres of open space, which would either be (1) dedicated to the East Bay Regional Park District or other public agency, (2) deeded to the local homeowners' association, or (3) retained by Hayward 1900 as open space; this open space dedication and/or preservation would assist in implementing plans for a continuous green belt from Lake Chabot to Garin Regional Park, provided that this aspect of the project is coordinated with the agencies cited in Strategy 1 above. Sections IV.B (Visual Factors), IV.E (Soils and Geology), and IV.F (Drainage and Water Quality) recommend mitigation measures that would help to ensure project consistency with Strategies 5, 6, and 9 above.

The *Mitigated Alternative* evaluated in section VI (Alternatives to the Proposed Project) presents an alternative development configuration for the project site that would assist in achieving consistency with these strategies.

h. Environmental Concerns Policies. Without mitigation, the project has the potential to be inconsistent with the following policy and related strategies:¹

Policy: The City will exercise its responsibility to protect environmental resources.

Strategy 4: Slow run-off with planting, retention ponds and stream bank restoration; limit non-porous paving and further creek channelization.

Strategy 5: Avoid extensive grading in hill areas and any development on unstable soils; maintain plant materials which stabilize hill areas.

Sections IV.E (Soils and Geology) and IV.F (Drainage and Water Quality) recommend measures that would assist in achieving project consistency with these strategies.

¹City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996; page VIII-15.

In addition, the project has the potential to be inconsistent with the following policy and related strategy:¹

Policy: The City will seek to protect the public health, safety and welfare against the adverse effects of excessive noise, consistent with the economic and environmental well-being of the City, and reaffirm desirability of quiet surroundings.

Strategy 2: Maintain conformity of new development with the principles and standards for land use compatibility, noise exposure and noise mitigation contained in the Noise Element.

As discussed in section IV.I (Noise) of this SEIR, project and cumulative traffic would generate noise increases of more than 5 dBA on Hayward Boulevard and Fairview Avenue. These noise increases could cause residences along these roadways to be exposed to noise levels that are considered unacceptable under the City's noise compatibility standards. Section IV.I identifies measures to mitigate these noise impacts, but indicates that project and cumulative traffic noise would remain a significant, unavoidable impact of the project as proposed. (See also "5. Noise Element" below.)

In addition, the project has the potential to be inconsistent with the following policy and related strategy:²

Policy: Hayward will promote energy conservation.

Strategy 1: Promote development patterns integrated with existing transit systems; promote transit, bike and pedestrian circulation.

The project as proposed does not include provisions for transit service. Sections IV.I (Air Quality) and IV.L (Energy) recommend measures that would assist the project in achieving compliance with this policy and related strategy.

i. Urban Design Policies. The project has the potential to be inconsistent with the following policy and related strategy:³

¹City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996; page VIII-17.

²City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996; page VIII-19.

³City of Hayward, General Policies Plan, adopted by City Council Resolution No. 86-127, May 6, 1986, as amended through January 9, 1996; page IX-9.

Policy: Principles of urban design will be used to guide development into compatible, attractive patterns.

Strategy 1: Preserve and enhance natural features such as hills, marshes, creeks, and significant vegetation by exercising land use controls and restoring marshes and creeks.

The project proposes development on a prominent hillside site that contains creeks and significant vegetation. Sections IV.B (Visual Factors), IV.C (Vegetation and Wildlife), IV.E (Soils and Geology), and IV.F (Drainage and Water Quality) recommend measures that would assist the project in achieving consistency with this policy and related strategy.

2. Growth Management Element

a. Open Space Framework Map. The "Open Space Framework" map of the *Growth Management Element* designates the portion of the project site located outside the *Urban Limit Line* as *Land to be Dedicated for Public Open Space in Connection With Development*. A portion of the project-proposed golf course would be located outside the *Urban Limit Line*, and therefore has the potential to conflict with this *Growth Management Element* designation, since the golf course would not represent dedicated public open space. Section VI (Alternatives to the Proposed Project) evaluates development alternatives that would eliminate this potential conflict.

b. Regional Growth Management Policies. The project would not present any inconsistencies with these policies.

c. Open Space Preservation Policies. The project would be inconsistent with the following policy:¹

(Policy E3d) ...hill development should be guided by the following considerations in order to preserve the amenities of the hills:...Generally, densities which feather out near the urban limit line (with larger, fewer lots) achieve a more natural development pattern for the hills.

The *Urban Limit Line* extends through the project site. The project proposes a General Plan amendment to change the land use designation of the portion of the project site within the *Urban Limit Line* from *Residential, Suburban Density (1.0 to 4.3 dwelling units per net acre)* to *Residential, Low Density (4.3 to 8.7 dwelling units per net acre)*. This change would be inconsistent with the above policy, which suggests that lower densities be maintained near the *Urban Limit Line*. Section VI (Alternatives to the Proposed

¹City of Hayward, *General Plan Growth Management Element*, adopted as part of the General Plan by City Council, July 13, 1993, with amendments as of January 9, 1996; page 13.

Project) evaluates development alternatives that would maintain lower residential densities on the site.

d. Housing and Economic Development Policies. The project would not present any inconsistencies with these policies.

e. Infrastructure Standards and Quality of Life Measures. Without mitigation, the project has the potential to be inconsistent with the following standard for park acreage:¹

(Provisional Standard)

<u>Type of Park</u>	<u>Service Radius</u>	<u>Size</u>	<u>Acres/1,000</u>
Local Park	1/4 to 1/2 mile	3-10 acres	1.5 acres
Community Park	2 to 3 miles	15-20 acres	6.0 acres
Other			2.5 acres
Total			10 acres

The project proposes dedication of a five-acre neighborhood park to the Hayward Area Recreation and Park District (HARD). This parkland dedication would not meet the above standard, which, when applied to the estimated project population of 1,911 people, translates to a parkland requirement of 19.2 acres. This issue is addressed in section IV.H.6 (Public Services, "Parks and Recreation") of this SEIR.

In addition, without mitigation, the project has the potential to be inconsistent with the following standard for school service:²

Proposals to legislate new residential potential should not be approved until adequate capacity is available as determined by the school district or guaranteed in an agreement between the developer and the school district for full mitigation. Each local school should be able to accommodate the children from proposed development without necessitating burdensome schedules for families or adding to expensive school busing. Classrooms and other facilities including the multi-purpose room, library, labs, or sports and recreation areas must not be overcrowded.

The Hayward Unified School District (HUSD) school capacity-vs.-enrollment data indicate that HUSD schools would not have adequate capacity to accommodate students from the new residential development proposed by the project. Section IV.H.3 (Public Services, "Schools") of this SEIR identifies various alternative measures to mitigate project school impacts in a manner consistent with this policy.

¹City of Hayward, General Plan Growth Management Element, page 44.

²City of Hayward, General Plan Growth Management Element, page 46.

3. Housing Element

The project would not present any inconsistencies with *Housing Element* policies.

4. Conservation and Environmental Protection Element

a. Geology Policies. Without mitigation, the project has the potential to be inconsistent with the following policies:¹

(Hill Area, Policy 1) If Hill Area development occurs, it should be concentrated in those areas considered geologically stable.

(Hill Area, Policy 2) Development should be discouraged in unstable areas, in areas that would become unstable if the vegetation that provides their present stability were removed, and in areas that are susceptible to debris flows from adjacent unstable slopes.

The project proposes development in the hill areas that may contain unstable slopes. Section IV.E (Soils and Geology) of this SEIR recommends measures that would assist the project in achieving consistency with these policies. It should be noted that these policies represent a general policy direction that was further refined in the 1995 Walpert Ridge Specific Plan (see discussion under "B. Walpert Ridge Specific Plan" below.)

b. Soils Policies. Without mitigation, the project has the potential to be inconsistent with the following policy:²

(Hill Area, Policy 1) Erosion should be minimized by (A) utilizing porous paving and surfacing materials; (B) preventing the establishment of steep grades and retaining natural land forms and drainage patterns; (C) developing storm retention ponds; (D) protecting existing vegetation with proper grazing and construction activities; (E) development should be concentrated in those areas least susceptible to erosion.

Sections IV.E (Soils and Geology) and IV.F (Drainage and Water Quality) of this SEIR recommend measures that would assist the project in achieving consistency with this policy.

¹City of Hayward, General Plan, Conservation and Environmental Protection Element, adopted March 22, 1977 and revised September 12, 1978; page 3.

²City of Hayward, General Plan, Conservation and Environmental Protection Element, adopted March 22, 1977 and revised September 12, 1978; page 5.

c. Vegetation and Wildlife Habitats Policies. The project has the potential to be inconsistent with the following policies:¹

(General, Policy 2) Where possible, mature vegetation should be preserved...

(General, Policy 3) Whenever possible, vegetation removed during construction should be replaced...

(General, Policy 4) To protect plant species from the effects of development: (A) Trees should be protected from construction activities...

(General, Policy 6) Development should not encroach into important wildlife habitats, limit normal range areas, or create barriers which cut off access to food, water, or shelter.

(General, Policy 7) Documented habitats of unique, rare and/or endangered species of plants and wildlife should be protected.

(General, Policy 8) Applications of toxic chemicals should be kept to a minimum. The use of biological and other non-toxic controls should be encouraged.

(Hill Area, Policy 1B) Should hill area development occur, care should be taken to avoid grading that would eliminate or nearly eliminate any particular habitat.

(Hill Area, Policy 1C) Deep-rooted plants which prevent landslides should not be disturbed.

(Hill Area, Policy 1D) The prominence and aesthetic significance of vegetation growing on urban-facing slopes should be recognized and these plant materials protected.

(Hill Area, Policy 3)...Should (hill) development occur, it should be concentrated in those areas where there is the least amount of vegetation and wildlife. Development should be clustered and concentrated to maximize preservation of natural food webs. Natural strips of land several hundred feet wide between developed areas should be retained when they can be expected to help preserve wildlife.

(Hill Area, Policy 5) Development should be avoided or minimized in woodland, forest, and scrub habitat.

(Hill Area, Policy 9) Containment of domestic animals shall be enforced.

¹City of Hayward, General Plan, Conservation and Environmental Protection Element, adopted March 22, 1977 and revised September 12, 1978; pages 6-10.

The project proposes urban development on a prominent hillside site that contains a variety of wildlife habitats, including non-native annual grassland, coast live oak forest, and coastal sage scrub. These plant communities provide habitat for a variety of rare and/or endangered species. Section IV.C (Vegetation and Wildlife) of this SEIR recommends measures to reduce project impacts on vegetation and wildlife, thereby assisting the project in achieving consistency with these policies. In addition, section IV.F (Drainage and Water Quality) recommends measures to reduce the potentially toxic effects resulting from application of pesticides, herbicides, and fertilizers on the proposed onsite golf course.

d. Climate and Air Quality Policies. The project would not present any inconsistencies with these policies.

e. Hydrology and Water Quality Policies. The project would not present any inconsistencies with these policies.

5. Noise Element

The project has the potential to be inconsistent with the following noise objective and policy:¹

Objective B: Promote land use patterns in which noise-sensitive uses are grouped together and separated, to the greatest possible extent, from major noise sources.

Policy 1 (re. ambient noise): Require all new development to conform with the principles and standards for land use compatibility, noise exposure, and noise mitigation contained in this Element and future plans.

As discussed in section IV.I (Noise) of this SEIR, project and cumulative traffic would generate noise increases of more than 5 dBA on Hayward Boulevard and Fairview Avenue. These noise increases could cause residences along these roadways to be exposed to noise levels that are considered unacceptable under the City's noise compatibility standards. Section IV.I identifies measures to mitigate these noise impacts, but indicates that project and cumulative traffic noise would remain a significant, unavoidable impact of the project as proposed. (See also "5. Noise Element" below.)

6. Hayward Earthquake Study (Seismic Safety Element)

The project does not present any inconsistencies with this document.

¹City of Hayward, Noise Element Policies Document (adopted July 26, 1977), pages 21-22.

B. WALPERT RIDGE SPECIFIC PLAN

The Walpert Ridge Specific Plan, adopted by the City of Hayward on July 25, 1995, contains policies that address land use, development prerequisites, financing, implementation, and design standards and guidelines for urban development on Walpert Ridge. The Specific Plan area includes the project site and adjacent properties on Walpert Ridge.

The currently proposed Blue Rock Country Club project includes an application for various amendments to the Walpert Ridge Specific Plan. These amendments would:

- (1) Increase the housing allocation for the Hayward 1900 property from the currently allowed range (413 units to a maximum potential of 453 units) to 603 units, and to increase the housing allocation for the Roman Catholic Bishop of Oakland property from 32 to 47 units;
- (2) Allow for lot sizes varying from 5,000 to over 10,000 square feet (rather than the current minimum lot size of 9,000 square feet);
- (3) Allow for all padded lots instead of a mixture of padded, limited padded, and sloped lots;
- (4) Allow for private streets and reduced street standards; and
- (5) Amend the development standards and design guidelines.

A complete set of proposed amendments to the Walpert Ridge Specific Plan is on file at the City of Hayward Department of Community and Economic Development. With City approval of these proposed amendments, the project would be consistent with the policies of the Walpert Ridge Specific Plan, as amended.

C. HAYWARD AREA RECREATION AND PARK DISTRICT MASTER PLAN

The Hayward Area Recreation and Park District (HARD) Master Plan, prepared in 1990, establishes policies and programs for HARD park and recreation facilities in the city of Hayward, as well as the unincorporated areas of Castro Valley, San Lorenzo, Cherryland, Ashland, and Palomares. The HARD Master Plan is intended to guide HARD decision-making over the period from 1990 to 2005.

Apparent project inconsistencies with relevant policies of the HARD Master Plan and associated EIR-recommended mitigations, are described below:

1. Parks and Facilities Standards

The project has the potential to be inconsistent with the following HARD standards:¹

<u>Park Type</u>	<u>Acreage Std.</u>	<u>Size</u>	<u>Service Radius</u>	<u>Level Area</u>
<i>Neighborhood</i>	<i>1.5 acres/1,000 population</i>	<i>3-10 acres</i>	<i>1/4-1/2 mile</i>	<i>3.0 acres</i>
<i>Community</i>	<i>6.0 acres/1,000 population</i>	<i>15-20 acres</i>	<i>2-3 miles</i>	<i>10 acres</i>
<i>Other</i>	<i>2.5 acres/1,000 population</i>			

The project proposes dedication of a five-acre neighborhood park to the Hayward Area Recreation and Park District (HARD). This parkland dedication would not meet the above standards, which, when applied to the estimated project population of 1,911 people, translates to a parkland requirement of 19.2 acres. This issue is addressed in section IV.H.6 (Public Services, "Parks and Recreation") of this SEIR.

2. Policies

The project does not present any inconsistencies with the policies of the HARD Master Plan.

D. CITY OF HAYWARD WATER DISTRIBUTION SYSTEM AND WASTEWATER MASTER PLANS

Section IV.H.4 (Public Services, "Water Services") addresses project consistency with the City of Hayward *Water Distribution System Master Plan*. Section IV.H.5 (Public Services, "Sewer Services") addresses project consistency with the City's *Wastewater Master Plan*.

E. PERTINENT REGIONAL PLANS

1. Proposed Land Use Policy Framework (ABAG)

The most recent regional land use policy document adopted by the Association of Bay Area Governments (ABAG) is entitled A Proposed Land Use Policy Framework for the San Francisco Bay Area, and was adopted by the ABAG Executive Board in July 1990. The document is described as a policy framework for future land use decisions in the Bay Area that respects the need for strong local control, but that also recognizes the importance of regional comprehensive planning for issues of regional significance.

The document contains policies that (1) direct growth where regional infrastructure (e.g., freeways, transit, water, solid waste disposal, sewage treatment) is available and natural resources will not be overburdened; (2) encourage development that discourages long-

¹Hayward Area Recreation and Park District Master Plan Technical Report, prepared for the Hayward Area Recreation and Park District by the Planning Collaborative, May 1990, Table 1, page 6.

distance commuting; (3) establish firm growth boundaries; and (4) encourage provision of housing at all levels. The project would generally be consistent with these policies, in that it (1) could be served by existing regional infrastructure systems, with improvements as recommended in sections IV.D (Transportation) and IV.H (Public Services) of this SEIR; (2) would provide housing opportunities that would assist the City of Hayward in achieving a better balance between local jobs and employed residents, thereby reducing the need for long-distance commuting; (3) would allow urban development only within the City-designated *Urban Limit Line*; and (4) would provide above-moderate income housing that would assist the City in meeting identified regional housing needs.

2. East Bay Regional Park District Master Plan

The project proposes golf course and roadway construction on a 20-acre portion of the project site owned by the East Bay Regional Park District (EBRPD), and may include dedication of an approximately 1,000-acre open space area on the project site to the EBRPD. These aspects of the project are subject to the policies of the East Bay Regional Park District Master Plan (1997). The Master Plan contains policies that address management of vegetation, wildlife, water resources, cultural resources, public access, and recreational facilities and services on EBRPD lands, as well as policies for land acquisition. With implementation of mitigation measures identified in sections IV.A (Land Use and Open Space), IV.B (Visual Factors), IV.C (Vegetation and Wildlife), IV.E (Soils and Geology), IV.F (Drainage and Water Quality), IV.G (Public Health and Safety), IV.H (Public Services), and IV.K (Cultural Resources) of this SEIR, the project would generally be consistent with the policies of the EBRPD Master Plan. The "Mitigated Alternative" evaluated in section VI (Alternatives to the Proposed Project) of the SEIR presents an alternative approach to development on the project site that would further reduce impacts on EBRPD property.

3. Bay Area '94 Clean Air Plan

The policies of the Bay Area Air Quality Management District's (BAAQMD's) Bay Area '94 Clean Air Plan call for consideration of traffic-related air quality impacts in the review of residential developments. Specifically, the BAAQMD calls for such air quality effects to be analyzed in environmental impact reports on such projects, subject to BAAQMD review. Section IV.J (Air Quality) of this SEIR provides such an analysis of air quality impacts, and an identification of relevant mitigation measures. As explained in section IV.J., the impact analysis methodology and mitigation recommendations were selected and formulated to comply with BAAQMD environmental impact assessment guidelines.

4. 1994 San Francisco Bay Basin Water Quality Control Plan

The San Francisco Bay Regional Water Quality Control Board (RWQCB) is the local agency responsible for administering the US Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit program. Effective October 1, 1992, the NPDES program has required permitting of individual developments that disturb more than

five acres of land. Developments of this size are required to address non-point source pollutants from sheet runoff, as well as construction-related impacts.

The RWQCB's 1994 San Francisco Bay Basin Water Quality Control Plan (Basin Plan) contains policies to control water quality, including urban runoff management and construction activity control. To implement the Basin Plan, the RWQCB has developed guidelines identifying Best Management Practices (BMPs) for reducing non-point source pollutants. Typical practices include increased street cleaning and installation of oil and grease separators, detention basins, infiltration areas, and trash racks.

As described in *Mitigations F-2 and F-3* in section IV.F (Drainage and Water Quality) of this SEIR, the applicant would be required to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP) for the site that includes Best Management Practices to reduce potential impacts on surface water quality through the construction and life of the project, as well as a *Golf Course Design and Management Plan* and *Water Quality Monitoring Plan* to reduce long-term water quality degradation in nearby creeks and in the groundwater table. With implementation of these measures, the project would present no significant inconsistencies with the Basin Plan.

5. Alameda County Congestion Management Program

The Alameda County Congestion Management Agency has prepared the Alameda County Congestion Management Program (CMP). State law mandates that CMPs contain the following four elements:

- traffic Level of Service (LOS) standards applied to a designated system of state highways and principal arterial streets;
- standards for public transit addressing frequency, routing, and coordination of service provided by separate operators;
- a seven-year capital improvement program (CIP) to maintain or improve the traffic level of service and transit performance standards; and
- a program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems.

Section IV.D (Transportation) of this SEIR has been prepared in a manner consistent with the requirements of the CMP.

VI. ALTERNATIVES TO THE PROPOSED PROJECT

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CEQA requires that EIRs contain an analysis of alternatives to the proposed project that would reduce or eliminate environmental impacts. Previous environmental documents, including the 1991 Walpert Ridge Specific Area Plan EIR, evaluated a series of development alternatives for the project site. This section of the SEIR (a) reviews the numerous previous alternatives evaluated for the site, (b) summarizes the findings of the 1991 EIR regarding alternatives, and (c) provides additional information that supplements the 1991 EIR findings, including evaluation of a "mitigated alternative" intended to reduce the potentially significant impacts identified in this SEIR of the current Blue Rock Country Club project proposal.

The CEQA Guidelines (section 15126(d)) stipulate that *"if the environmentally superior alternative is the no project alternative, the EIR shall identify an environmentally superior alternative among the other alternatives."* Of the various alternatives evaluated in the 1991 EIR and this SEIR other than the "no-project" ("no development" variation) alternative, the **Mitigated Alternative**, which would substantially reduce the key visual, geotechnical, and biotic impacts of the project, would result in the least adverse combination of impacts and would therefore be the "environmentally superior" alternative.

A. PREVIOUSLY-EVALUATED ALTERNATIVES

In its 1980 General Plan, the City of Hayward designated properties on Walpert Ridge for residential development. Since that time, numerous alternatives addressing a range of possible land uses, densities, and urban development area limits have been evaluated in several environmental documents. This SEIR subsection briefly reviews those various alternatives evaluated in EIRs prepared prior to the 1991 Walpert Ridge Specific Area Plan EIR. (Please refer to section III.B, Project Description, "Site History," for a discussion of the various development concepts outlined for the project site in City of Hayward-approved planning documents, including the Walpert Ridge Specific Area Plan and the Walpert Ridge Specific Plan, as well as in the report to the City Council prepared by the Ad Hoc Committee on Hayward 1900.)

1. 1979 EIR for Walpert Ridge Specific Area Plan

This EIR analyzed the environmental implications of a range of development alternatives for Walpert Ridge, including a proposal for a total of 1,800 to 2,300 homes. This latter proposal, which was ultimately reflected in the Walpert Ridge Specific Area Plan adopted by the City of Hayward in 1980, also included requirements for open space dedication, local park dedication, school site dedication, and construction of traffic improvements. Other alternatives analyzed

in the 1979 EIR included (1) a no-project alternative; (2) commercial or industrial use; (3) private open space use; (4) public acquisition of the property by a federal, state, or regional agency; and (5) a range of residential development (500 units, 1,500 units, 3,500 units, and 5,500 units).

2. 1988 EIR for The Ridge Development

This EIR analyzed a project proposed for the Hayward 1900 property on Walpert Ridge (the subject project site). The following alternatives were evaluated:

- (a) **Proposed Project.** The proposed 1988 project consisted of 1,815 low-, medium-, and high-density housing units on the Hayward 1900 property, with a resulting total buildout of 2,300 units on the overall Walpert Ridge. The project also included 13 acres of commercial uses, a school site, 1,172 acres of open space, onsite circulation and utility improvements, and offsite circulation improvements. The City revised and ultimately approved development of up to 1,250 housing units and a 10-acre commercial center on the Hayward 1900 property.
- (b) **Lower Density Alternative (615 units).** This alternative consisted of construction of 615 housing units on 380 acres.
- (c) **Lower Density Alternative (900 units).** This alternative consisted of 900 single-family housing units on approximately 380 acres.
- (d) **1,254-Unit Alternative.** This alternative consisted of a 1,243-unit development plan that, unlike the eventually approved 1988 project, included development in a portion of the southernmost area of the Hayward 1900 property, known as Section 32. Certain features of this alternative were incorporated into the 1988 approved project.
- (e) **1,602-Unit Alternative.** This alternative consisted of a 1,602-unit project on approximately 540 acres.
- (f) **Offsite Alternatives.** In reviewing the applicant's request for partial cancellation of Williamson Act contracts on the project site (which have since expired), the City Council also examined possible alternative sites for development of the project. The City Council concluded that there was no proximate noncontracted land that was both available and suitable for the proposed project objectives and uses.

B. SUMMARY OF 1991 EIR FINDINGS

1. Identified Alternatives

The 1991 Walpert Ridge Specific Area Plan EIR addressed alternatives for development of the Specific Area Plan area by evaluating two types of "no-project" alternatives as well as a range of residential development options (please refer to Figure 1 in section I, Introduction, which illustrates the geographical configurations of these options):¹

- (a) **No-Project Alternative.** The 1991 EIR evaluated two approaches to the "no-project" alternative, one assuming no development on Walpert Ridge, and the other assuming no adoption of the Walpert Ridge Specific Area Plan (i.e., development under the adopted Hayward General Policies Plan at that time, which would have allowed a range of between 1,600 and 1,799 units).²
- (b) **500-Unit Alternative.** The 1991 EIR also evaluated development of 500 housing units, with three subalternatives for locating the units on each of three subareas of the Specific Plan area: (1) the area extending one mile southeast from the convergence of Fairview Avenue and Hayward Boulevard (the Fairview Loop); (2) Fire Station No. 5's service area, extending approximately 1.5 miles southeast from the Fairview Loop; and (3) the area north of the Meincke property (now owned by the East Bay Regional Park District).
- (c) **700-Unit Alternative.** The 1991 EIR also evaluated development of 700 housing units in any of the three subareas described above for the 500-Unit Alternative.
- (d) **900-Unit Alternative.** The 1991 EIR also evaluated development of 900 housing units in any of the three subareas described above for the 500-Unit Alternative.
- (e) **1,800-Unit Alternative.** The 1991 EIR also evaluated development of 1,800 housing units in the area north of the wildlife corridors in Section 32, extending approximately two miles southeast from the Fairview Loop.

Please refer to the 1991 Walpert Ridge Specific Area Plan EIR (on file at the City of Hayward Department of Community and Economic Development) for a full discussion of these alternatives.

¹Environmental Science Associates, Inc., Walpert Ridge Specific Area Plan Environmental Impact Report, February 22, 1991 (draft), pages 3 and 217.

²*Ibid.*, page 217.

2. Relationship to Currently Proposed Project

Each of the four subalternative development subareas described for alternatives (b) through (e) above included portions of the current Blue Rock Country Club project site (see Figure 1 in section I, Introduction). As discussed in section I, the portion of the site currently proposed for urban development corresponds most closely to the Fire Station No. 5 (1.5-mile) service area evaluated in the 1991 EIR. The level of development proposed by the project (650 single-family housing units), combined with other cumulative development anticipated in the Specific Plan area (155 housing units), totals 805 housing units, and falls between the 700- and 900-unit alternatives evaluated in the 1991 EIR.

The CEQA Guidelines require that EIRs include identification and evaluation of a reasonable range of alternatives that would reduce the impacts of the proposed project. For purposes of alternatives evaluation in this SEIR, the no-project (no development on Walpert Ridge) alternative and the 500 units within the 1.5-mile service area of Fire Station No. 5 alternative may be considered as alternatives that could reduce the potential environmental impacts of the currently proposed Blue Rock Country Club project. Other alternatives evaluated in the 1991 EIR would not be as likely to reduce the impacts of the currently proposed project, due to their higher unit count (700, 900, or 1,800 units) and/or their more extensive geographical configurations.

C. SUPPLEMENTAL FINDINGS

This subsection presents two additional alternatives formulated for evaluation in this SEIR: (1) the Existing Land Use Policies (i.e., current 1995 Walpert Ridge Specific Plan policies) Alternative, and (2) the Mitigated Alternative. The "No-Project" (current 1995 Walpert Ridge Specific Plan policies) alternative has been added to depict how the environmental consequences of buildout of the project site under the current adopted specified plan policies (which were adopted in 1995 after release of the 1991 EIR) would compare with the project and the other alternatives. The "Mitigated Project" alternative has been included to depict how the environmental consequences of a development program incorporating the various onsite mitigations recommended in this SEIR would compare with the project as proposed and the other alternatives.

The impacts of these two alternatives and those of the two applicable 1991 EIR alternatives--the No-Project (No Development on Walpert Ridge) Alternative and the 500 Units Within 1.5 Mile Service Area Alternative--are then compared in this section with the impacts of the currently proposed project. In conclusion, the "environmentally superior" alternative is identified.

1. Existing Land Use Policies Alternative

Since the time that the 1991 EIR was certified, the City of Hayward has adopted the Walpert Ridge Specific Area Plan (1991) and subsequently the Walpert Ridge Specific Plan (1995). The 1995 Walpert Ridge Specific Plan and the latest version of the City of Hayward General Plan establish the current land use policies for the project site and surrounding properties on Walpert Ridge. These current land use policies represent one combination of the various plan scenarios addressed as the "project" in the 1991 EIR. Buildout of the site under these adopted 1995 policies would represent a variation of the "no project" scenario (i.e., development under adopted City general plan policies) identified in the 1991 EIR.

(a) Principal Characteristics. Under the provisions of the current, 1995 Walpert Ridge Specific Plan, a total of 575 units could be constructed in the Walpert Ridge area. This 575-unit total consists of 445 units on the project site (413 units on the Hayward 1900 property and 32 units on the Roman Catholic Bishop of Oakland property), plus 116 units on the adjoining Bailey property, and 14 units on the adjoining Carden property.¹ In accordance with the *Residential, Suburban Density* land use designation of the City of Hayward General Policies Plan, these units would be developed at a density of 1.0 to 4.3 dwelling units per net acre. Development would be contained within the *Urban Limit Line* designated by the General Plan.

For purposes of evaluating this particular "no-project" alternative, it is also assumed that a golf course would not be developed in the Walpert Ridge area.

(b) Comparative Mitigating and Adverse Effects. Compared with the currently proposed 650-unit/18-hole golf course project plus permitted cumulative development on the other Walpert Ridge properties, this alternative would have the following mitigating and adverse effects:

Land Use and Open Space. Under this alternative, the City of Hayward General Policies Plan and Walpert Ridge Specific Plan would not be amended to allow higher density residential development on the project site, and thus the site would be developed at densities similar to existing residential development in the Prominence subdivision and planned residential development on the adjacent Bailey and Carden properties. Without development of the golf course, a larger portion of the project site could be available for dedication as open space to the East Bay Regional Park District or other public agency. With development of slightly fewer housing units (445 units, as opposed to 650 units proposed by the project), this alternative would make a correspondingly smaller contribution toward achieving a better balance between local jobs and housing opportunities in Hayward, and toward meeting the City's regional

¹Memorandum from Hanson Hom, City of Hayward, to John Wagstaff, et al., re. "Potential Units on Walpert Ridge," May 7, 1997. These housing allocations assume a density bonus for all properties, but no mitigation agreement with the Hayward Unified School District (HUSD). In accordance with the 1995 Walpert Ridge Specific Plan (page 22), Hayward 1900's housing allocation would be 433 to 453 units if Walpert Ridge property owners/developers entered into this agreement.

housing needs. Other land use and open space impacts of this alternative would be similar to those of the project as proposed.

Visual Factors. By allowing less dense residential development on the project site, this alternative would produce substantially reduced visual impacts, particularly at close distances, when compared with the proposed project. Elimination of the proposed golf course may also be considered to reduce the visual impact of development on the site.

Vegetation and Wildlife. Impacts of this alternative on vegetation and wildlife would be substantially less than those described for the project. Exclusion of the golf course would eliminate the general loss of habitat, and the specific loss of oak woodland associated with that project component.

Transportation. The reduced housing yield and the elimination of the golf course and tennis club components under this alternative would result in a corresponding approximately 39 percent reduction in the project contribution to cumulative PM peak hour traffic impacts, and an associated slight reduction in offsite roadway system improvement needs.

Soils and Geology. The effects of this alternative would be similar to those of the project as proposed, although the degree (volume) of grading would be substantially reduced due to elimination of the golf course.

Drainage and Water Quality. The effects of this alternative would be similar to those of the project as proposed.

Public Health and Safety. The effects of this alternative would be similar to those of the project as proposed.

Public Services. The effects of this alternative would be similar to those of the project as proposed, although the reduced housing yield would result in corresponding substantial (approximately 32 percent) reductions in demand for fire protection, emergency medical service, police, schools, parks and recreation, water, sewer, library, solid waste, and other government services. Since this alternative would not contain a golf course, water use would also be reduced, as compared with the project as proposed. It is possible that an onsite elementary school would not be provided under this alternative, thereby causing greater impacts on Hayward Unified School District elementary schools, as compared with the project.

Noise. The effects of this alternative would be similar to those of the project as proposed, although the reduced housing yield would result in corresponding slight reductions in cumulative traffic-noise related impacts.

Air Quality. The effects of this alternative would be similar to those of the project as proposed, although the reduced housing yield would result in a corresponding approximately 27 percent reduction in project emission of ozone precursors (CO, NO_x, and PM₁₀).

Cultural Resources. The effects of this alternative would be similar to those of the project as proposed, although the reduced residential yield would allow for substantial increases in residential clustering as a means of avoiding sensitive sites. Elimination of the golf course could also reduce the potential for disturbance of sensitive sites.

Energy. The effects of this alternative would be similar to those of the project as proposed, but would result in an approximately 32 percent reduction in the level of annual project energy use.

2. Mitigated Alternative

The various impacts identified in this SEIR for the currently proposed project form the basis for the "Mitigated Alternative" that is described below as a possible means of reducing or eliminating certain key significant environmental impacts identified in this SEIR.

(a) Principal Characteristics. This alternative would consist of a revised development plan for the project that would incorporate all of the key onsite, physical mitigations recommended in this SEIR. This alternative also incorporates removal of the adjoining EBRPD and Roman Catholic Bishop properties from the development program so that the environmental consequences of such a change, if it were to occur in the future, are addressed (if, for example, a mutually satisfactory acquisition arrangement between the applicant and these two landowners is not executed). Other aspects of the project would remain as described in section III (Project Description) of this SEIR.

The key characteristics of this alternative are as follows:

- **Implementation of SEIR-recommended grading, landscape, site, and building design measures to reduce visual impacts.** This alternative would include revisions to the project grading plan to reduce the overall extent of grading; reduce the depths of cut and fill; reduce the degree of grading on the ridge crest; incorporate more natural appearing, more undulating finished contours; and retain more of the site's identified sensitive visual features such as rock outcrops. This alternative would incorporate the specific grading plan, site plan, landscape plan, and design standard revisions and refinements identified in this SEIR to reduce project impacts on views from Garin Regional Park and on middle- and long-range views from the East Bay Plain. These revisions include a combination of measures to reduce the visual impacts of homes at the ridge crest, the golf clubhouse, and the golf course fairways, as recommended in section IV.B (Visual Factors) of this SEIR. These measures would reduce the impacts of this alternative on views from Garin Regional Park, the East Bay Plain, and elsewhere in Hayward; achieve a higher level of conformance with City grading policies, standards, guidelines, and requirements; and reduce impacts on onsite sensitive visual features such as knolls and rock outcroppings. (See *Mitigations VF-1 through VF-5*.)
- **Revised neighborhood park configuration.** Under this alternative, the onsite park would be linked to an adjoining park site currently planned for the Bailey property,

immediately west of the Hayward 1900 site. This configuration would accommodate soccer, softball, and baseball fields, and surrounding observation areas. (See *Mitigation PS-10.*)

- **Relocation of golf course maintenance building.** Under this alternative, the golf course maintenance building (proposed by the project to be located on Roman Catholic Bishop of Oakland property) would be relocated onto the Hayward 1900 property, where it would be less visible from Garin Regional Park. (See *Mitigation VF-1.*)
- **Relocation of Garin Park Lane.** Under this alternative, Garin Park Lane (proposed by the project to be relocated partially offsite on EBRPD property adjoining Garin Regional Park) would be relocated onto Hayward 1900 property further east of Garin Regional Park. In this location, the lane would be less visible from the regional park, and would have less potential to diminish the quality of the park experience for users of this park. (See *Mitigation LU-6 and VF-1.*)
- **Reduced grading on the main ridge crest.** Under this alternative, measures listed above to reduce visual impacts, as well as increased use of development clustering, would be incorporated to reduce the visual impact of project grading and development atop the main ridge crests. (See *Mitigation VF-4.*)
- **Relocation of swim/tennis club.** Under this alternative, the proposed swim/tennis club would be relocated to avoid steep slopes and intrusion into oak woodlands.
- **Elimination of golf course.** This alternative would eliminate the proposed golf course from the project plans, reducing general visual and geotechnical impacts and possibly reducing public service, drainage/water quality, and other impacts identified in this SEIR.
- **Elimination of development on adjoining EBRPD and Roman Catholic Bishop properties.** This alternative would eliminate residential and golf course development on the adjoining 20-acre East Bay Regional Park District (EBRPD) property and the 57 acres of Roman Catholic Bishop of Oakland property (see Figure 5 in section III, Project Description). The project site would thus be reduced in size to 1,558 acres, consisting of the property currently owned by the applicant, Hayward 1900.

For purposes of this SEIR analysis, it is assumed that this alternative would yield approximately **445 dwelling units** on the revised project site, which would consist of Hayward 1900-owned property only. The current, 1995 Walpert Ridge Specific Plan allows 445 units on the Hayward 1900 property.

(b) Mitigating and Adverse Effects. Compared with the currently proposed project, this alternative would have the following mitigating and adverse effects:

Land Use and Open Space. With development of fewer housing units (445 units, as opposed to 650 units proposed by the project), this alternative would make a correspondingly smaller contribution toward achieving a better balance between local jobs and housing opportunities in Hayward, and toward meeting the City's regional housing needs. Other land use and open

space impacts of this alternative would be similar to those of the project as proposed, although open space impacts would be reduced due to elimination of the proposed golf course, and land use conflicts with adjoining regional parks would be reduced due to elimination of the golf course and elimination or relocation of Garin Park Lane.

Visual Factors. By incorporating the mitigation measures recommended in this SEIR, this alternative would result in substantially reduced impacts on short-range views from Garin Regional Park and on middle- and long-range views from the East Bay Plain. This alternative would also result in reduce loss of onsite sensitive visual features, and increased project consistency with adopted City policies regarding visual values.

Vegetation and Wildlife. This alternative would result in the protection of the approximately six acres of oak woodland that would be disturbed under the current project (June 1997) grading plan. Other impacts of this alternative on vegetation and wildlife would be similar to those described for the project, although elimination of the golf course could allow a larger proportion of the project site to remain in its natural condition.

Transportation. The effects of this alternative would be similar to those of the project as proposed, although the approximately 32 percent reduction in housing yield and elimination of the golf course would result in a corresponding approximately nine percent reduction in the project contribution to cumulative traffic impacts, and an associated very slight decrease in overall transportation impact mitigation needs.

Soils and Geology. The effects of this alternative would be similar to those of the project as proposed, although incorporation of measures identified in section IV.B (Visual Factors) of this SEIR could result in a substantial reduction in the total cut-and-fill volumes (due to elimination of the golf course), a slight reduction in other identified grading and slope stability impacts, and increased project compliance with City-adopted grading standards and guidelines.

Drainage and Water Quality. The effects of this alternative would be similar to those of the project as proposed.

Public Health and Safety. The effects of this alternative would be similar to those of the project as proposed.

Public Services. The effects of this alternative would be similar to those of the project as proposed, although the approximately 32 percent reduction in housing yield would result in corresponding slight reductions in demand for fire protection, emergency medical service, police, schools, parks and recreation, water, sewer, library, solid waste, and other government services. Since this alternative would not contain a golf course, water use would also be reduced, as compared with the project as proposed. The revised configuration of the onsite neighborhood park would be a beneficial aspect of this alternative, while elimination of the onsite golf course would prevent the project from assisting in meeting the existing unmet demand for golf courses in Hayward.

Noise. The effects of this alternative would be similar to those of the project as proposed, although the approximately 32 percent reduction in housing yield and the elimination of the golf course would result in corresponding very slight reductions in traffic-noise related disturbances.

Air Quality. The effects of this alternative would be similar to those of the project as proposed.

Cultural Resources. The effects of this alternative would be similar to those of the project as proposed, although elimination of the proposed golf course could reduce the potential for disturbance of sensitive sites.

Energy. The effects of this alternative would be similar to those of the project as proposed.

3. Impact Comparison Summary

Table 58 provides a summary comparison of the environmental consequences of the four alternatives evaluated in this section of the SEIR, as compared with the proposed project.

4. Environmentally Superior Alternative

The CEQA Guidelines (section 15126(d)) stipulate that *"if the environmentally superior alternative is the no project alternative, the EIR shall identify an environmentally superior alternative among the other alternatives."* Of the various alternatives evaluated in the 1991 EIR and this SEIR other than the "no-project" ("no development" variation) alternative, the **Mitigated Alternative**, which would substantially reduce the key visual, geotechnical, and biotic impacts of the project, would result in the least adverse combination of impacts and would therefore be the "environmentally superior" alternative.

Table 58

IMPACTS OF ALTERNATIVES RELATIVE TO PROPOSED PROJECT

<u>Environmental Issue:</u>	<u>Alternative A: No Project</u>	<u>Alternative B: Existing Policies (445 units)</u>	<u>Alternative C: 500 Units/ 1.5 Mile Service Area</u>	<u>Alternative D: Mitigated Project (445 units)</u>
A. Land Use and Open Space Impacts	Substantially mitigated	Partially mitigated	Partially mitigated	Partially mitigated
B. Visual Impacts	Substantially mitigated	Little change	Little change	Partially mitigated
C. Vegetation and Wildlife Impacts	Substantially mitigated	Little change	Little change	Substantially mitigated
D. Transportation Impacts	Substantially mitigated	Little change	Little change	Little change
E. Geotechnical Impacts	Substantially mitigated	Little change	Little change	Partially mitigated
F. Drainage and Water Quality Impacts	Substantially mitigated	Little change	Little change	Partially mitigated
G. Public Health and Safety Impacts	Substantially mitigated	Little change	Little change	Little change
H. Public Services Impacts	Substantially mitigated	Little change	Little change	Little change
I. Noise Impacts	Substantially mitigated	Little change	Little change	Little change
J. Air Quality Impacts	Substantially mitigated	Little change	Little change	Little change
K. Cultural Resources Impacts	Substantially mitigated	Little change	Little change	Little change
L. Energy Impacts	Substantially mitigated	Little change	Little change	Little change

SOURCE: Wagstaff and Associates.

VII. CEQA-REQUIRED ASSESSMENT CONCLUSIONS

VII. CEQA-REQUIRED ASSESSMENT CONCLUSIONS

This section summarizes the SEIR findings in terms of the various assessment categories suggested by the California Environmental Quality Act (CEQA) Guidelines for EIR content. Report findings are summarized with respect to "growth-inducing effects," "significant unavoidable impacts," "irreversible environmental changes," "effects found not to be significant," and "cumulative impacts." These findings supplement those of the 1991 EIR.

A. GROWTH-INDUCING EFFECTS

(1) Direct Population, Housing, and Employment Increases. The proposed project would add approximately 650 residential units to the City of Hayward, which would provide housing for an estimated 1,911 people. The project would also provide an 18-hole golf course (including restaurant), swim/tennis club, and joint school/park site, which would create job opportunities on the site.

(2) Precedent-Setting Effects. Under existing City of Hayward General Plan and Walpert Ridge Specific Plan policies, up to 445 single-family units, at densities of 1.0 to 4.3 units per net acre, could be constructed on the project site in the area within the *Urban Limit Line* (assuming no school mitigation agreement--see further discussion in section III, Project Description). The applicant is requesting General Plan and Specific Plan amendments that would allow up to 650 single-family units, at densities of 4.3 to 8.7 units per net acre, to be developed on the area within the *Urban Limit Line*.

City approval of the requested amendments could encourage owners of other nearby property currently designated for lower density residential or agricultural use to seek similar General Plan and Specific Plan amendments to permit higher density urban development. The extension of public facilities and services and increased roadway capacity to serve the project would also be growth-inducing, facilitating additional urbanization in the project vicinity.

As discussed in section IV.A (Land Use and Open Space) of this SEIR, extension of utility infrastructure to the project site and development of urban land uses on the site would be especially likely to increase the viability and likelihood of future development on two adjoining properties: (1) the Bailey property, which adjoins the western boundary of the project site and may be developed with up to 116 housing units in accordance with the Walpert Ridge Specific Plan; and (2) the Carden property, which adjoins the northwestern portion of the project site and may be developed with up to 14 housing units in accordance with the Specific Plan.

B. SIGNIFICANT UNAVOIDABLE IMPACTS

This EIR indicates that the project would produce the following impacts that may be reduced by the related mitigations identified in this SEIR, but not to less-than-significant levels, and thus would represent *significant unavoidable impacts*:

- Loss of 574 acres of existing ridgeline and hillside open space on the project site that currently has aesthetic, biotic, and agricultural values (a significant project and cumulative impact). (*Impact LU-1*)
- Loss of adjoining open space due to cumulative development on the Bailey and Carden properties. (*Impact LU-9*)
- Visual intrusion of the onsite PG&E electrical transmission line for project residents and golf course and swim/tennis club users. (*Impact VF-6*)
- Cumulative traffic effects at the intersections of Second Street/E Street, Mission Boulevard/Carlos Bee Boulevard, and Mission Boulevard/Harder Road, if funding for necessary improvements (beyond funding provided by the project) cannot be secured. (*Impacts T-2 through T-5*)
- Noise increases of more than 5 dBA on Hayward Boulevard and Fairview Avenue due to project and cumulative traffic. (*Impact N-4*)
- Short-term, construction-period inhalable particulates (PM₁₀) and equipment exhaust emissions. (*Impacts AQ-1 and AQ-2*)
- Emissions of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x) and inhalable particulates (PM₁₀) from project and cumulative traffic that would exceed Bay Area Air Quality Management District (BAAQMD) significance thresholds. (*Impact AQ-3*)
- Use of substantial amounts of energy for project construction and operations (*Impacts E-1 and E-2*)
- Comparatively wasteful uses of transportation fuel, if AC Transit is not able to extend bus service to the site. (*Impact E-3*)

C. IRREVERSIBLE ENVIRONMENTAL CHANGES

Irreversible environmental changes caused by the project would include the following:

- loss of 574 acres of onsite open space, as described in section IV.A, Land Use and Open Space, of this SEIR;
- transportation improvements, as described in section IV.D, Transportation, of this SEIR;
- water and sewer service extensions, as described in section IV.H, Public Services, of this SEIR;

- loss of existing plant and wildlife habitat, as described in section IV.C, Vegetation and Wildlife, of this SEIR;
- possible loss of prehistoric and historic resources, as described in section IV.K, Cultural Resources, of this SEIR; and
- consumption of construction materials and energy resources for urban development allowed by the project.

D. EFFECTS FOUND NOT TO BE SIGNIFICANT

Previous environmental reviews of development plans for the Walpert Ridge area, including the project site, have determined that a number of possible environmental effects would be insignificant or could be adequately addressed by City staff in the development review process without further environmental assessment in an EIR. These insignificant effects include:

- (1) the destruction, covering, or modification of any unique geologic or physical features;
- (2) alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally;
- (3) changes in currents, or the course or direction of water movements, in either marine or fresh waters;
- (4) alteration of the direction or rate of ground waters;
- (5) possible interference with an emergency response plan or an emergency evacuation plan;
- (6) effect on existing parking facilities, or demand for new parking;
- (7) alterations to waterborne, rail, or air traffic; and
- (8) restrictions on existing religious or sacred uses within potential impact areas.

E. CUMULATIVE IMPACTS

The CEQA Guidelines (section 15355) define "cumulative impacts" as *"...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."* The cumulative effects of the project and surrounding local and subregional development are discussed where applicable in the findings described in section IV of this SEIR for each pertinent environmental topic area (e.g., land use, transportation, public services, air quality, and noise). Reasonably foreseeable projects are

identified in Table 4 (Additional Land Development Potential in Hayward) section IV.A, Land Use and Open Space. In addition, cumulative development was incorporated into the traffic model used to evaluate the transportation impacts of the project and project-plus-cumulative development (as described in section IV.D, Transportation), as well as associated noise and air quality impacts (sections IV.I, Noise, and IV.J, Air Quality); Table 15 (Households and Employment in Hayward and Alameda County) in section IV.D (Transportation) summarizes household and employment projections incorporated in the model. In some cases, as noted in the SEIR text, cumulative development is defined as the proposed project plus other development on the adjacent Bailey and Carden properties on Walpert Ridge (805 total units).

VIII. MITIGATION MONITORING

VIII. MITIGATION MONITORING PLAN

A. BACKGROUND

On January 1, 1989, AB 3180 became law in California. The bill requires all public agencies to adopt reporting or monitoring programs when they approve projects subject to environmental impact reports.¹ The complete text of the bill can be found in Section 21081.6 of the Public Resources Code. Pursuant to this law, a mitigation monitoring program must be implemented by the City of Hayward following certification of the Blue Rock Country Club Project SEIR. A completed version of the *Mitigation Monitoring Checklist* form suggested by Table 59 will be submitted with the Final version of this SEIR, and will include all mitigations identified in the Final SEIR.

Most of the environmental mitigation measures recommended in this SEIR will be subject to effective monitoring through the City's normal development review procedures, including post-EIR processing of the proposed general plan amendment, Walpert Ridge Specific Plan amendments, rezoning to *Planned District*, associated preliminary development plan, precise plan, and subdivision applications, design review approval, building permit approval, and associated plan check and construction period field inspection procedures. However, to satisfy CEQA Section 21081.6, a documented record of implementation will be necessary.

B. RECOMMENDED APPROACH TO MONITORING IMPLEMENTATION

1. Implementation Responsibilities

The party responsible for implementing each mitigation measure identified in this SEIR is suggested in Chapter II of this SEIR (see column four of the summary table). The project applicant will have primary responsibility for implementation of most of the required mitigation measures.

2. Checklist

A *Mitigation Monitoring Checklist* form is suggested by Table 59 for city use in meeting the requirements of AB 3180; i.e., in establishing the "who, what, when, and how" aspects for each mitigation measure from this SEIR that is ultimately required as a condition of project approval. The checklist format includes spaces for: (1) a summary of each significant impact

¹Randy Pestor and Ron Bass, "Mitigation Monitoring and Reporting," California Planner, January 1989.

identified in the Final SEIR (excerpted directly from the Summary in SEIR section II.C); (2) a summary of each mitigation measure identified in the Final SEIR that has been adopted as a condition of project approval by the City; (3) an identification of the type of monitoring action required; (4) an identification of the party responsible for performing and verifying the monitoring action; and (5) an identification of associated timing requirements.

Table 59
MITIGATION MONITORING PROGRAM--BLUE ROCK COUNTRY CLUB PROJECT

The environmental mitigation measures listed in column two below have been incorporated into the conditions of approval for the Blue Rock Country Club project in order to mitigate identified environmental impacts. A completed and signed chart will indicate that each mitigation requirement has been complied with, and that city and state monitoring requirements have been fulfilled with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

IDENTIFIED IMPACT	RELATED MITIGATION MEASURE (CONDITION OF APPROVAL)	MONITORING				VERIFICATION	
		Impl. Entity ¹	Type of Monitoring Action ²	Timing Requirements ³	Monitoring and Verification Entity ⁴	Signature	Date
A. LAND USE							
Impact LU-1.							
Impact LU-2.							
Impact LU-3.							
Impact LU-4.							
Impact LU-5.							
B. VISUAL FACTORS							
Impact VF-1.							
Impact VF-2.							
Impact VF-3.							
Impact VF-4.							
Impact VF-5.							

¹ Appl. = Applicant; Contr. = Construction Contractor; HARD = Hayward Area Recreation and Parks District
² CPI = Construction Period Inspection; OTC = One-time Confirmation Action; PC = Plan Check; POC = Post Occupancy Inspection; SMS = Specialized Monitoring Study; SSR = Subsequent Standard Review
³ DPC = During Project Construction; PBP = Prior to Issuance of Building Permit; PFM = Prior to Approval of Final Map; PGP = Prior to Issuance of Grading Permit; PPO = Prior to Project Occupancy; PTM = Prior to Tentative Map; STR = Specialized Timing Requirement
⁴ ACFCD = Alameda County Flood Control District; BAAQMD = Bay Area Air Quality Management District; BART = Bay Area Rapid Transit District; Caltrans = California Department of Transportation; CDFG = California Department of Fish and Game; HARD = Hayward Area Recreation and Parks District; HBI = Hayward Building Inspection; HCE = Hayward City Engineer; HCP = Hayward Community Planning and Economic Development Division; HES = Hayward Hazardous Materials/Environmental Specialist; HFP = Hayward Fire Prevention; HPD = Hayward Police Department-Animal Control; HTS = Hayward Transportation Services; HPWD = Hayward Public Works Department; HUSD = Hayward Union School District; HWE = Hayward Water Engineer; HWPB = Hayward Water Pollution Administrator; RWQCB = Regional Water Quality Control Board; USACOE = U.S. Army Corps of Engineers

IX. ORGANIZATIONS AND PERSONS CONTACTED

IX. ORGANIZATIONS AND PERSONS CONTACTED

A. CITY OF HAYWARD

Alex Ameri, Deputy Director of Public Works/Utilities, Public Works Department
Dyana Anderly, Development Review Services Administrator, Department of Community and Economic Development
Larry Arfsten, Assistant Fire Marshal, Fire Department
Marilyn Baker-Madsen, Library Director, Hayward Public Library
Robert Bauman, Deputy Director of Public Works, Public Works Department
John Boykin, Fire Chief, Fire Department
Gerry Browne, Fire Marshal, Fire Department
Gary Calame, Senior Planner, Department of Community and Economic Development
Craig Calhoun, Police Chief, Police Department
Reh-lin Chen, Associate Transportation Planner, Public Works Department
Sylvia Ehrental, Director of Community and Economic Development, Department of Community and Economic Development
Hanson Hom, Senior Planner/Landscape Architect, Department of Community and Economic Development
Fred Kelley, Senior Transportation Planner, Public Works Department
Jim Lear, Associate Civil Engineer, Public Works Department
Penny Nakatsu, Assistant City Attorney, City Attorney's Office
Jeanette Peck, Development Review Services Engineer, Department of Community and Economic Development
Matt Tomas, Planner, Department of Community and Economic Development
Paul Wallace, Lieutenant, Police Department

B. APPLICANT

Dan Bucko, Golf Course Architect, Bryan Grunwald Associates
Joanna Callenbach, Project Manager, YCS Investments
Steve Foreman, Biologist, Resource Management International (RMI)
Bryan Grunwald, Principal, Bryan Grunwald Associates
Lise Hinman, Project Manager, YCS Investments
Joe Holland, Dowling Associates
James MacNair, Principal, MacNair & Associates
Greg Miller, Civil Engineer, Carlson, Barbee & Gibson
Jack Munson, Principal, Fee Munson Ebert

Joe Petrillo, Attorney, Sheppard, Mullin, Richter & Hampton
Lori Wider, Attorney, Sheppard, Mullin, Richter & Hampton

C. OTHER

Karen Borrmann, Associate Engineer, Alameda County Flood Control and Water Conservation District

Linda Pratt Chavez, Park Planner, East Bay Regional Park District

Joe DiDonato, Biologist, East Bay Regional Park District

Arnie Glassberg, Deputy Superintendent, Hayward Unified School District

Bruce Kaneshiro, Regulatory Analyst, California Public Utilities Commission

Larry Lepore, Facilities Supervisor, Hayward Unified School District

Al Spatcher, Land Agent, PG&E

Eric Willyerd, Parks Superintendent, Hayward Area Recreation and Park District

X. APPENDICES

APPENDIX A
NOTICE OF PREPARATION



CITY OF HAYWARD
DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT
Development Review Services Division

*Hea
of
Bay*

NOTICE OF PREPARATION

DATE: May 30, 1997

TO: Public Agencies, Private or Business Organizations, and Interested Parties
(see distribution list)

SUBJECT: **BLUE ROCK COUNTRY CLUB**
Hayward 1900, Inc.
General Plan Amendment 94-103
Specific Plan Amendment 95-210-01
Zone Change 94-98

LOCATION: City of Hayward, southeast of Hayward Boulevard and Fairview Avenue
within the Walpert Ridge Specific Plan area

This notice is to inform you that the City of Hayward has received an amended development proposal from Hayward 1900, Inc., dated May 23, 1997, to develop a residential/golf course community on a site totaling 1,655 \pm acres. (Refer to the attached location map and project summary.) The City of Hayward will be the lead agency and will prepare a Supplemental/Subsequent Environmental Impact Report (SEIR) for the project identified above. We would like to invite comments from interested persons, organizations, and responsible agencies as to the scope and content of the environmental information that is germane to the proposed project.

The project description, location and requested approvals are described in the attachment. The City has on file in the Development Review Services Division detailed development plans, supporting materials, and technical studies and surveys (including geology, biological resources, water quality, infrastructure, traffic generation, fiscal analysis, and cultural resources) that pertain to the proposal.

The Program EIR for the Walpert Ridge planning area was certified by the City in September 1991. The City has determined that significant changes have occurred to the project or project setting such that a Supplemental or Subsequent EIR will be required for the project.

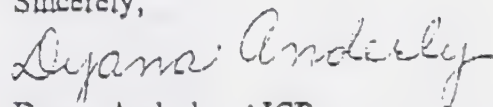
Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but *not later than 30 days* after receipt of this notice (or by June 30, 1997).

Please send your response to:

City of Hayward
Development Review Services Division
25151 Clawiter Road
Hayward, California 94545
Attn: Dyana Anderly

If you would like to review the detailed plans or technical reports or would like more information about the development proposal, please contact Dyana Anderly, at (510) 293-5242.

Sincerely,



Dyana Anderly, AICP
Development Review Services Administrator

Distribution List:

Alameda County Congestion Mgmt Agency
Alameda County Flood Control & Water Cons. Dist.
Alameda County Planning Department
Alameda County Public Works
Alameda County Transit
Alameda County Health Agency
Dept. of Environmental Health
Association of Bay Area Governments
Bay Area Air Quality Management District
Bay Area Rapid Transit
Bay Area Ridge Trail Council
California State University, Hayward
East Bay Regional Park District
Fremont, City of, Planning Department
Greenbelt Alliance
Hayward Area Recreation District
Hayward Chamber of Commerce
Hayward Unified School District
Hayward City Council
Hayward Planning Commission

Pacific Bell
Pacific Gas & Electric Company
Pleasanton, City of, Planning Department
Preserve the Ridglands Committee
Regional Water Quality Control Board
Sheppard, Mullin, Richter & Hampton (applicant)
Sierra Club
State of California, Department of Fish & Game
TCI Cablevision
Union City Community Development
U.S. Army Corps of Engineers
U.S. Fish & Wildlife Service
Waste Management of Alameda County
YCS Investments/Hayward 1900 (Applicant)
Keenan Land Company
Roman Catholic Church of Oakland
Morton Carden
Neighborhood Associations
300' Property Owners

Attachment: Project Summary
Location Map
Preliminary Development Plan (Sheet 15)

PROJECT SUMMARY BLUE ROCK COUNTRY CLUB

Project Description

The proposed development (amended May 23, 1997) would be located on the northern 443± acres of the project site closest to Hayward Boulevard, with the remaining property proposed for preservation as public and private open space. The development proposal includes the following land uses:

- 1) 650 single-family lots ranging in size from 5,000 to 12,000+ square feet;
- 2) Integrated 18-hole championship golf course with clubhouse, maintenance area, and driving range;
- 3) Private tennis and swim club;
- 4) Joint elementary school/public park site; (developer will construct a core facility for 350 children in the initial stages of the project;) and,
- 5) Accommodation for the Bay Area Ridge Trail.

Environmental Setting

Subject to confirmation, Hayward 1900 (applicant) proposes to locate all residential uses within the existing Urban Limit Line (1.6 miles driving distance from Fire Station No. 5). As defined in the Walpert Ridge Specific Plan, the golf course would surround the residential use and extend along the ridge about 0.9 mile south of the Urban Limit Line.

The project site is defined by a major northwest-southeast trending ridge rising from approximately 1300 feet near Fairview Avenue to over 1500 feet at the eastern edge of the property. Branching off of the main ridge are several narrow secondary ridges. The ridgetop areas are characterized by undulating slopes, annual grasses, and scattered rock outcroppings. The grasslands are presently used for cattle-grazing. Development is primarily proposed along the ridge where grades are relatively gradual, varying from 0 to 25 percent. The slopes surrounding the ridge areas are characterized by oak woodland vegetation with intervening pockets of coastal scrub vegetation. These slopes are quite steep with grades typically exceeding 25 percent. The western half of the property is located in the upper reaches of the Dry Creek watershed, which drains into Garin Regional Park. The eastern half of the property drains into the Palomares Creek watershed. A small portion of the property at the northern end drains into Ward Creek.

Private improvements on the Hayward 1900 property consist of dirt or gravel service roads, barbed wire fencing, and several cattle stock ponds. Several utility improvements are located on the property consisting a P.G. & E. transmission line that runs along the main ridge, an A.T. & T. microwave tower located at the north end of the property, and a City reservoir located east of Fairview Avenue. The Roman Catholic property includes a dwelling and structures related to the cattle-grazing use.

Primary access to the site is via Hayward Boulevard or Fairview Avenue, which leads to Mission Boulevard (State Route 238) to the west and to Interstate 580 to the north, respectively. The Downtown Hayward and Castro Valley BART stations are located 10 to 20 minutes from the project site.

Located north of the project site across Hayward Boulevard and Fairview Avenue are single-family homes. Located to the west and east is undeveloped land under various private ownerships. The East Bay Regional Park District owns lands southwest (Garin Regional Park), east, and north of the project site. The Five Canyons residential community, currently under construction, is located approximately two miles north of the project site within Alameda County. The project site is located approximately two miles east of Cal State Hayward.

Requested City Approvals

The development proposal will/may require the following City approvals:

- 1) Amend the General Policies Plan Map to change the land use designation for approximately 340 acres from Residential, Suburban Density (1.0 to 4.3 dwelling units per net acre) to Residential, Low Density (4.3 to 8.7 dwelling units per net acre).
- 2) Amend the General Plan to adjust the Urban Limit Line (ULL), unless it is determined that all residential development will be contained within the existing ULL. In accordance with Ordinance 97-01, approved by the City Council on March 3, 1997, this potential General Plan amendment would require the approval of Hayward voters.
- 3) Amend the Walpert Ridge Specific Plan as follows:
 - a) Adjust the Urban Development Area and Urban Limit Line for consistency with the above General Plan amendments, if required;
 - b) Increase the housing allocation on the Hayward 1900 and Roman Catholic Church properties from 413 to 650 units;
 - c) Allow a reduction in the minimum lot size from 9,000 square feet (7,000 square feet under special circumstances) to 5,000 square feet;
 - d) Allow for primarily padded lots instead of a mixture of padded, limited padded, and sloped lots;
 - e) Allow for a gated community with private streets and reduced street standards;
 - f) Amend the Land Use Plan as needed to correspond to the development proposal; and
 - g) Amend the development standards and design guidelines as needed.

- 4) Rezone approximately 585 acres from AG (Agricultural District) to PD (Planned Development District) to encompass the proposed residential community and golf course.

Program EIR

The Supplemental/Subsequent Environmental Impact Report (SEIR) for the proposed project will rely on the Program EIR for the Walpert Ridge Specific Area Plan, which was certified by the City Council on September 24, 1991. The Program EIR evaluates the potential environmental impacts of various levels of development within the 2,200-acre Walpert Ridge planning area. Hayward 1900 is the largest property owner within the planning area. Four development options were evaluated ranging from 500 units to 1800 single-family units. Additionally, several options for the geographic location of development were considered in combination with the range of potential units. Possible environmental impacts and recommended mitigation measures were identified for each development scenario. (A copy of this EIR is on file at the City of Hayward, Community and Economic Development Department, Development Review Services Division.)

Potential Significant Environmental Impacts:

The SEIR will incorporate the latest plans, technical studies, and environmental site surveys that have been prepared for the proposal. The SEIR will also evaluate the proposal with consideration of the most recent policies, plans, regulations, and standards of the City as well as other responsible or trustee agencies that will have jurisdiction over aspects of the project. In accordance with Section 15162 of the State CEQA Guidelines, the SEIR will evaluate the following environmental issues:

- 1) *Land Use and Planning:* The SEIR will evaluate the potential environmental impacts related to proposed amendments to the General Plan, Walpert Ridge Specific Plan, and Growth Management Element.
- 2) *Geology and Grading:* Potential impacts to be evaluated in the SEIR consist of both short-term (construction) and long term (permanent) impacts relating to possible soil erosion, water quality degradation, and landslides from the proposed mass grading for the residential use and golf course. The impact of the proposed development on significant site features, which are identified in the Walpert Ridge Specific Plan will also be assessed.
- 3) *Water Quality:* The SEIR will determine project-specific mitigation measures for ensuring compliance with the Clean Water Act and the National Pollution Discharge Elimination System (NPDES) Program, including the recommendations of the Alameda County Runoff Clean Water Program. For the golf course, potential impacts pertaining to irrigation and storm run-off and the discharge of fertilizers, pesticides, and herbicides to downstream open space drainages will be evaluated.
- 4) *Air Quality:* Potential impacts relate to construction activity (primarily from grading) and operational effects (primarily from motor vehicle emissions). The SEIR will determine if the project will impact current federal and state ambient air quality standards, with

reference to the most recent guidelines from the Bay Area Air Quality Management District (BAAQMD).

- 5) *Transportation/Circulation:* The impact of the project on the existing local street system and regional highway (State Route 238) will be evaluated. A new traffic analysis will be prepared by the City based on the latest travel demand model that has been certified by the Alameda County Congestion Management Agency. The potential traffic impacts will be assessed with scenarios that include and exclude the construction of the Route 238 Bypass project.
- 6) *Biological Resources:* The SEIR will evaluate potential impacts pertaining to large predator habitat and wildlife habitat for federal or state-listed endangered, threatened or rare species such as the Alameda Whipsnake and the Red-legged Frog. The assessment of potential impacts will be based on the protocols established by the State Department of Fish and Game and U.S. Fish and Wildlife Service. Other potential impacts that will be assessed include: a) the effect of the proposal on identified wetlands and the mitigation measures that will be required by the Corps of Engineers; and 2) the effect of the proposal on large trees and other native vegetation.
- 7) *Energy:* The SEIR will evaluate the potential impacts of the project on energy consumption. Mitigation measures for reducing energy and improving energy efficiency will be explored during the construction and operation of the project.
- 8) *Hazards:* Potential impacts to be evaluated in the SEIR pertain to exposure of future dwellings to possible wildfires at the urban/wildland interface and adequate fire and emergency access to the proposed development. The SEIR will consider the degree that project provisions (e.g. an irrigated golf course and fully sprinklered dwellings) will mitigate these potential impacts.
- 9) *Noise:* Potential impacts pertaining to disturbance of surrounding residents from construction activity and vehicles will be evaluated.
- 10) *Public Service:*
 - a. Fire and Police Protection: The SEIR will evaluate the service needs for the development based on the service goals and standards established by the Fire and Police Departments.
 - b. Schools: Potential impacts on public school facilities will be assessed based on the most recent student yield factors from the Hayward Unified School District (HUSD) and the existing capacity of the schools.
 - c. Parks and Recreation: Potential impacts will be evaluated pertaining to the added demand for parks and recreation programs from future residents within the development.

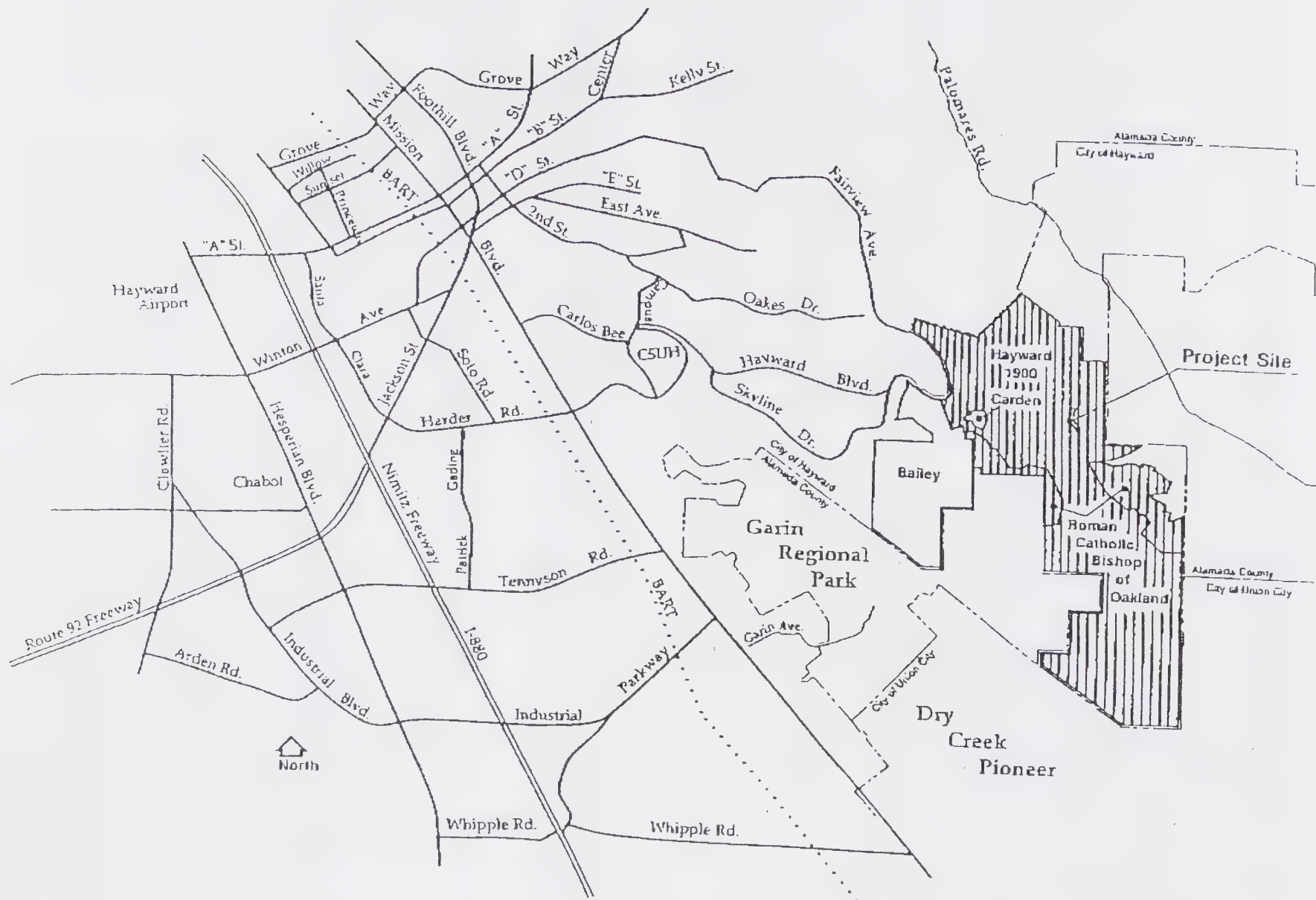
- 5 -

- d. Other Public Services: Potential impacts on other City services will be evaluated, such as street maintenance, landscape services, library, and general government services.

11) *Utilities and Service Systems:*

- a) Water: The SEIR will analyze the impact of the proposed development on the City's off-site water distribution system, including the need to upgrade certain pump stations and transmission mains to serve the project. The feasibility of alternative sources of water for the golf course will also be evaluated. The project will be reviewed for consistency with the City's Water Distribution System Master Plan (1995).
- b) Wastewater Collection System: The project will be reviewed for consistency with the City's Wastewater Collection System Master Plan (1995).
- c) Storm Drainage: The proposed development could potentially cause soil erosion, siltation, and degradation of water quality at downstream areas unless properly mitigated. The SEIR will determine the extent that the proposed stormwater collection system, including detention/retention basins, will adequately detain the velocity, volume and peak flow of stormwater run-off and retain sediments and pollutants from the project. Compliance with NPDES requirements will also be addressed.
- d) Solid Waste: The SEIR will evaluate the impact of the project on the waste reduction requirements of AB 939 (California Integrated Waste Management Act of 1989) and the reduction goals established by Alameda County.

- 12) *Aesthetics:* The Program EIR evaluated the potential visual impacts of development on Walpert Ridge and suggested mitigation measures for reducing these impacts. The SEIR will determine the extent that these mitigation measures have been incorporated into the project and will suggest additional mitigation measures where appropriate.
- 13) *Cultural Resources:* The evaluation in the Program EIR will be reviewed for compliance with the criteria (Appendix K in State CEQA Guidelines) for identifying and evaluating impacts on potentially significant archeological and cultural resources.





BLUE ROCK COUNTRY CLUB
PRELIMINARY DEVELOPMENT PLAN
HAYWARD, CALIFORNIA

DEAN GRUNWALD ASSOCIATES
LAND PLANNING, LANDSCAPE ARCHITECTURE
AND GOLF COURSE ARCHITECTURE
SAN FRANCISCO, CALIFORNIA

CARLSON, BARBER & GIBSON, INC.
CIVIL ENGINEERING
SAN MARINO, CALIFORNIA

LEE MUNSON FOREST
ARCHITECTURE
SAN FRANCISCO, CALIFORNIA

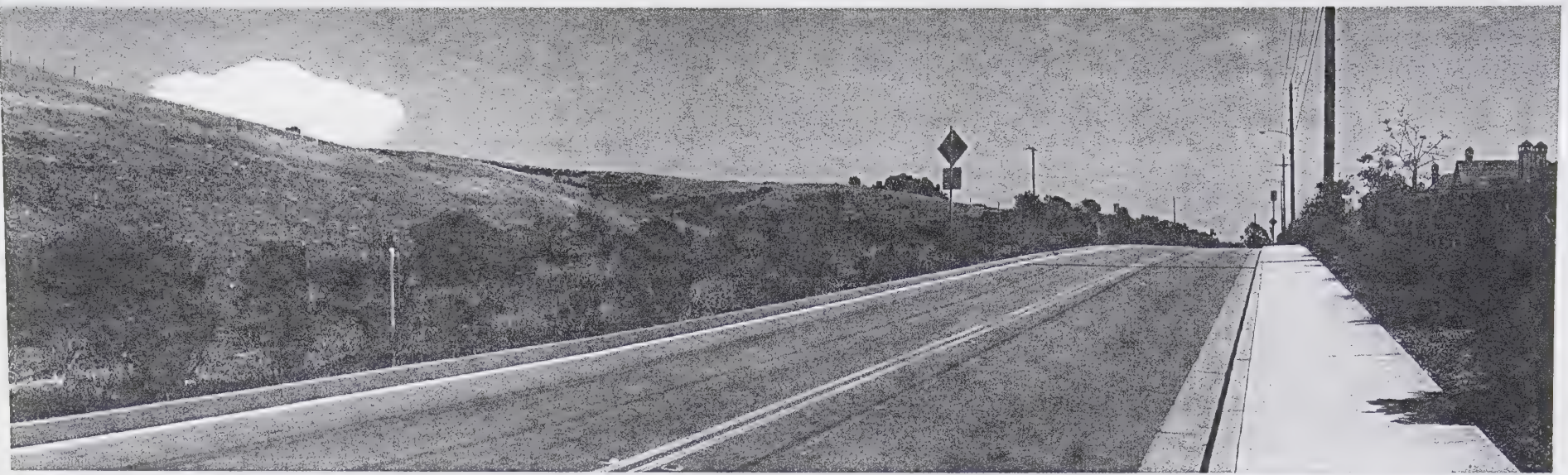
RAU
NATURAL RESOURCE CONSULTANTS
SAN MARINO, CALIFORNIA

HUNT RESEARCH CORPORATION
FIRE PROTECTION CONSULTANTS
SANTA FEZ, CALIFORNIA

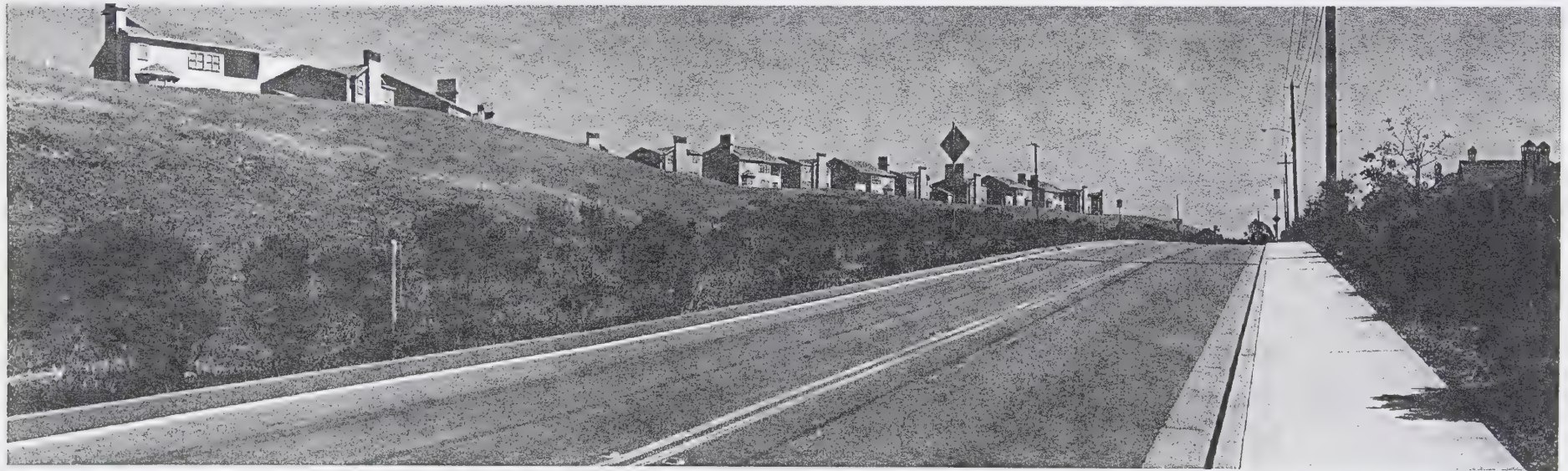


APPENDIX B

SUPPLEMENTAL VISUAL FACTORS INFORMATION



Existing view from Fairview Avenue



Visual simulation of proposed project without landscaping



Existing view from Garin Regional Park



Visual simulation of proposed project without landscaping

APPENDIX C

SUPPLEMENTAL VEGETATION AND WILDLIFE INFORMATION

Table 1
Plant Species Observed on the
Hayward 1900 Project Site
August 1,3, 1995¹ and April 23, 1997²

<i>Acer macrophyllum</i> ²	<i>Erodium moschatum</i> ²
<i>Achillea millefolium</i> ²	<i>Eschscholzia californica</i> ^{1,2}
<i>Aesculus californica</i> ²	<i>Eucalyptus globulus</i> ^{1,2}
<i>Agoseris</i> sp. ²	<i>Fragaria californica</i> ²
<i>Aira caryophylla</i> ^{1,2}	<i>Fragaria chiloensis</i> ²
<i>Allium</i> sp. ²	<i>Galium murale</i> ²
<i>Amsinckia menziesii</i> var. <i>intermedia</i> ²	<i>Galium</i> sp. ¹
<i>Anagalis arvensis</i> ²	<i>Genista monspessulana</i> ¹
<i>Anthriscus caucalis</i> ²	<i>Geranium dissectum</i> ²
<i>Artemesia douglasii</i> ²	<i>Geranium molle</i> ²
<i>Artemisia californica</i> ^{1,2}	<i>Gnaphalium californicum</i> ²
<i>Aster</i> sp. ²	<i>Gnaphalium</i> sp. ²
<i>Avena barbata</i> ^{1,2}	<i>Hemizonia congesta</i> ssp. <i>luzulifolia</i> ¹
<i>Avena fatua</i> ^{1,2}	<i>Heraculum lanatum</i> ²
<i>Baccharis pilularis</i> ²	<i>Holocarpha</i> sp. ²
<i>Brassica nigra</i> ^{1,2}	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> ²
<i>Briza minor</i> ²	<i>Hordeum murinum</i> ssp. <i>leporinum</i> ^{1,2}
<i>Bromus carinatus</i> ^{1,2}	<i>Hordeum depressum</i> ²
<i>Bromus diandrus</i> ^{1,2}	<i>Juncus bufonius</i> var. <i>bufonius</i> ^{1,2}
<i>Bromus hordeaceus</i> ^{1,2}	<i>Juncus phaeocephalus</i> ²
<i>Calystegia malacophylla</i> ssp. <i>pedicellata</i> ²	<i>Juncus</i> sp. ¹
<i>Camissonia ovata</i> ²	<i>Lepidium nitidum</i> ²
<i>Carduus pycnocephala</i> ²	<i>Lessingia</i> sp. ²
<i>Carex</i> sp. ^{1,2}	<i>Linum bienne</i> ^{1,2}
<i>Chamomilla suaveolens</i> ²	<i>Lolium multiflorum</i> ^{1,2}
<i>Chlorogalum pomeridianum</i> ^{1,2}	<i>Lolium perenne</i> ¹
<i>Cirsium vulgare</i> ^{1,2}	<i>Lotus scoparius</i> ^{1,2}
<i>Claytonia perfoliata</i> ²	<i>Lupinus bicolor</i> ²
<i>Conium maculatum</i> ^{1,2}	<i>Lupinus</i> sp. ^{1,2}
<i>Convovulus arvensis</i> ²	<i>Lythrum hyssopifolia</i> ^{1,2}
<i>Cotoneaster pannosa</i> ¹	<i>Madia sativa</i> ¹
<i>Danthonia californica</i> ²	<i>Marrubium vulgare</i> ^{1,2}
<i>Dichelostemma congestum</i> ²	<i>Medicago polymorpha</i> ^{1,2}
<i>Epilobium brachycarpum</i> ²	<i>Mimulus aurantiacus</i> ^{1,2}
<i>Epilobium canum</i> ¹	<i>Nassella pulchra</i> ^{1,2}
<i>Equisetum arvense</i> ¹	<i>Perideridia kelloggii</i> ¹
<i>Erigeron philadelphicus</i> ²	<i>Picris echioides</i> ^{1,2}
<i>Erodium botrys</i> ¹	<i>Pinus radiata</i> ²
<i>Erodium cicutarium</i> ²	<i>Plantago coronopus</i> ¹

Table 1
 Plant Species Observed on the
 Hayward 1900 Project Site
 August 1,3, 1995¹ and April 23, 1997²

<i>Plantago lanceolata</i> ^{1,2}	<i>Vicia sativa</i> ssp. <i>sativa</i> ^{1,2}
<i>Polypodium californicum</i> ²	<i>Vinca major</i> ²
<i>Prunus</i> sp. ²	<i>Vulpia bromoides</i> ²
<i>Pteridium aquilinum</i> ²	<i>Wyethia angustifolia</i> ²
<i>Quercus agrifolia</i> ^{1,2}	<i>Wyethia glabra</i> ²
<i>Raphanus sativus</i> ^{1,2}	
<i>Ranunculus californicus</i> ^{1,2}	
<i>Rhamnus californica</i> ^{1,2}	
<i>Robinia pseudoacacia</i> ²	
<i>Rosa</i> sp. ²	
<i>Rubus discolor</i> ²	
<i>Rubus ursinus</i> ²	
<i>Rumex acetosella</i> ^{1,2}	
<i>Rumex crispus</i> ^{1,2}	
<i>Rumex pulcher</i> ²	
<i>Rupertia physodes</i> ²	
<i>Salix lasiolepis</i> ^{1,2}	
<i>Sambucus mexicana</i> ^{1,2}	
<i>Sanicula crassicaulis</i> ^{1,2}	
<i>Scandix pecten-veneris</i> ²	
<i>Scrophularia californica</i> ²	
<i>Sherardia arvensis</i> ²	
<i>Sidalcea</i> sp. ²	
<i>Silene gallica</i> ²	
<i>Silybum marianum</i> ^{1,2}	
<i>Sisyrinchium bellum</i> ^{1,2}	
<i>Sisymbrium officinale</i> ²	
<i>Sonchus asper</i> ^{1,2}	
<i>Stachys ajugoides</i> ssp. <i>rigida</i> ²	
<i>Stachys bullata</i> ¹	
<i>Stellaria media</i> ²	
<i>Symphoricarpos albus</i> var. <i>laevigatus</i> ¹	
<i>Symphoricarpos mollis</i> ²	
<i>Taraxacum officinale</i> ²	
<i>Thermopsis macrophylla</i> var. <i>argentata</i> ¹	
<i>Toxicodendron diversilobum</i> ^{1,2}	
<i>Trifolium depauperatum</i> ¹	
<i>Trifolium dubium</i> ²	
<i>Trifolium hirtum</i> ²	
<i>Trifolium subterraneum</i> ²	
<i>Trifolium variegatum</i> ¹	
<i>Triteleia hyacinthina</i> ²	
<i>Umbellularia californica</i> ^{1,2}	

Notations:

1 - Plants observed by Environmental Sciences Associates (ESA) on August 1, 3, 1995.

2 - Plants observed by Monk & Associates on April 23, 1997.

Table 2
Wildlife Species Known From
Walpert Ridge
Hayward, California

<u>Common Name</u>	<u>Scientific Name</u>
AMPHIBIANS	
California newt ^{1,2}	<i>Taricha torosa</i>
California slender salamander ¹	<i>Batrachoseps attenuatus</i>
western toad ¹	<i>Bufo boreas</i>
Pacific tree frog ^{1,2,3}	<i>Pseudacris regilla</i>
arboreal salamander ¹	<i>Aneides lugubris</i>
yellow-eyed salamander ¹	<i>Ensatina eschscholtzii xanthoptica</i>
California red-legged frog ^{1,2}	<i>Rana aurora draytonii</i>
REPTILES	
racer ¹	<i>Coluber constrictor</i>
western skink ¹	<i>Eumeces skiltonianus</i>
gopher snake ¹	<i>Pituophis melanoleucus</i>
western fence lizard ^{1,2}	<i>Sceloporus occidentalis</i>
southern alligator lizard ¹	<i>Gerrhonotus multicarinatus</i>
western aquatic garter snake ¹	<i>Thamnophis couchii</i>
western terrestrial garter snake ¹	<i>Thamnophis elegans</i>
ringneck snake ¹	<i>Diadophis punctatus</i>
common kingsnake ¹	<i>Lampropeltis getulus</i>
sharp-tailed snake ¹	<i>Contia tenuis</i>
Alameda whipsnake ¹	<i>Masticophis lateralis euryxanthus</i>
MAMMALS	
Virginia opossum ¹	<i>Didelphis virginiana</i>
ornate shrew ¹	<i>Sorex ornatus</i>
Trowbridge shrew ¹	<i>Sorex trowbridgii</i>
broad-footed mole ^{1,2}	<i>Scapanus latimanus</i>
California myotis ¹	<i>Myotis californicus</i>
long-eared myotis ¹	<i>Myotis evotis</i>
western pipistrelle ¹	<i>Pipistrellus hesperus</i>
big brown bat ¹	<i>Eptesicus fuscus</i>
silvery-haired bat ¹	<i>Lasionycteris noctivagans</i>
pallid bat ¹	<i>Antrozous pallidus</i>
lump-nosed bat (a.k.a. western big eared bat) ¹	<i>Plecotus townsendii</i>
Brazilian free-tailed bat ¹	<i>Tadarida macrotis</i>

Table 2
Wildlife Species Known From
Walpert Ridge
Hayward, California

brush rabbit¹
 black-tailed hare¹
 fox squirrel¹
 Botta's pocket gopher^{1,3}
 Heermann's kangaroo rat¹
 western harvest mouse¹
 dusky-footed woodrat^{1,3}
 California meadow vole¹
 deer mouse^{1,3}
 California mouse¹
 house mouse¹
 gray fox¹
 coyote^{1,2,3}
 raccoon¹
 striped skunk^{1,2,3}
 mountain lion¹
 bobcat^{1,3}
 feral cat¹
 Columbian black-tailed deer^{1,3}

Sylvilagus bachmani
Lepus californicus
Sciurus niger
Thomomys bottae
Dipodomys heermanni
Reithrodontomys megalotis
Neotoma fuscipes
Microtus californicus
Peromyscus maniculatus
Peromyscus californicus
Mus musculus
Urocyon cinereoargenteus
Canis latrans
Procyon lotor
Mephitis mephitis
Felis concolor
Felis rufus
Felis catus
Odocoileus hemionus columbianus

BIRDS

pied-billed grebe¹
 great blue heron¹
 great egret¹
 snowy egret¹
 green heron¹
 mallard¹
 turkey vulture^{1,2,3}
 red-tailed hawk^{1,2,3}
 red shouldered hawk¹
 white-tailed kite¹
 northern harrier¹
 golden eagle^{1,2}
 sharp-shinned hawk¹
 Cooper's hawk¹
 American kestrel¹
 ring-necked pheasant¹
 California quail^{1,2}
 American coot¹

Podilymbus podiceps
Ardea herodias
Casmerodius albus
Egretta thula
Butorides striatus
Anas platyrhynchos
Cathartes aura
Buteo jamaicensis
Buteo lineatus
Elanus leucurus
Circus cyaneus
Aquila chrysaetos
Accipiter striatus
Accipiter cooperi
Falco sparverius
Phasianus colchicus
Callipepla californica
Fulica americana

Table 2
Wildlife Species Known From
Walpert Ridge
Hayward, California

killdeer ^{1,2}	<i>Charadrius vociferus</i>
rock dove ^{1,3}	<i>Columba livia</i>
band-tailed pigeon ¹	<i>Columba fasciata</i>
mourning dove ^{1,3}	<i>Zenaida macroura</i>
barn owl ^{1,2}	<i>Tyto alba</i>
great horned owl ¹	<i>Bubo virginianus</i>
western screech owl ¹	<i>Otus kennicottii</i>
white-throated swift ¹	<i>Aeronautes saxatalis</i>
Anna's hummingbird ^{1,3}	<i>Calypte anna</i>
Allen's hummingbird ¹	<i>Selasphorus sasin</i>
rufous hummingbird ¹	<i>Selasphorus rufus</i>
belted kingfisher ¹	<i>Ceryle alcyon</i>
red-breasted sapsucker ¹	<i>Sphyrapicus ruber</i>
Nuttall's woodpecker ¹	<i>Picoides nuttallii</i>
downy woodpecker ¹	<i>Picoides pubescens</i>
northern flicker ¹	<i>Colaptes auratus</i>
western wood-pewee ¹	<i>Contopus sordidulus</i>
Pacific slope flycatcher ¹	<i>Empidonax difficilis</i>
black phoebe ¹	<i>Sayornis nigricans</i>
ash-throated flycatcher ¹	<i>Myiarchus cinerascens</i>
western kingbird ¹	<i>Tyrannus verticalis</i>
horned lark ^{1,3}	<i>Eremophila alpestris</i>
tree swallow ¹	<i>Tachycineta bicolor</i>
violet-green swallow ¹	<i>Tachycineta thalassina</i>
northern rough-winged swallow ¹	<i>Stelgidopteryx serripennis</i>
cliff swallow ¹	<i>Hirundo pyrrhonota</i>
barn swallow ^{1,3}	<i>Hirundo rustica</i>
Steller's jay ^{1,3}	<i>Cyanocitta stelleri</i>
scrub jay ^{1,3}	<i>Aphelocoma coerulescens</i>
common raven ¹	<i>Corvus corax</i>
American crow ¹	<i>Corvus brachyrhynchos</i>
chestnut-backed chickadee ¹	<i>Parus rufescens</i>
plain titmouse ¹	<i>Parus inornatus</i>
bushtit ^{1,3}	<i>Psaltiriparus minimus</i>
brown creeper ¹	<i>Certhia americana</i>
Bewick's wren ^{1,3}	<i>Thryomanes bewickii</i>
house wren ¹	<i>Troglodytes aedon</i>
ruby-crowned kinglet ¹	<i>Regulus calendula</i>
western bluebird ^{1,3}	<i>Sialia mexicana</i>
Swainson's thrush ¹	<i>Catharus ustulatus</i>
hermit thrush ¹	<i>Catharus guttatus</i>

Table 2
Wildlife Species Known From
Walpert Ridge
Hayward, California

American robin ^{1,3}	<i>Turdus migratorius</i>
varied thrush ¹	<i>Ixoreus naevius</i>
wrentit ^{1,3}	<i>Chamaea fasciata</i>
northern mockingbird ¹	<i>Mimus polyglottos</i>
California thrasher ¹	<i>Toxostoma redivivum</i>
Cedar waxwing ¹	<i>Bombycilla cedrorum</i>
loggerhead shrike ¹	<i>Lanius ludovicianus</i>
European starling ^{1,3}	<i>Sturnus vulgaris</i>
warbling vireo ¹	<i>Vireo gilvus</i>
Hutton's vireo ¹	<i>Vireo huttoni</i>
orange-crowned warbler ¹	<i>Vermivora celata</i>
yellow-rumped warbler ¹	<i>Dendroica coronata</i>
MacGillivray's warbler ¹	<i>Oporornis tolmiei</i>
Wilson's warbler ¹	<i>Wilsonia pusilla</i>
western tanager ¹	<i>Piranga ludoviciana</i>
black-headed grosbeak ¹	<i>Pheucticus melanocephalus</i>
lazuli bunting ¹	<i>Passerina amoena</i>
spotted towhee ¹	<i>Pipilo erythrophthalmus</i>
California towhee ¹	<i>Pipilo crissalis</i>
lark sparrow ^{1,3}	<i>Chondestes grammacus</i>
rufous-crowned sparrow ¹	<i>Aimophila ruficeps</i>
chipping sparrow ¹	<i>Spizella passerina</i>
savannah sparrow ¹	<i>Passerculus sandwichensis</i>
fox sparrow ¹	<i>Passerella iliaca</i>
song sparrow ¹	<i>Melospiza melodia</i>
Lincoln's sparrow ¹	<i>Melospiza lincolnii</i>
golden-crowned sparrow ¹	<i>Zonotrichia atricapilla</i>
white-crowned sparrow ¹	<i>Zonotrichia leucophrys</i>
dark-eyed junco ¹	<i>Junco hyemalis</i>
red-winged blackbird ^{1,3}	<i>Euphagus phoeniceus</i>
western meadowlark ^{1,2,3}	<i>Sturnus neglecta</i>
Brewer's blackbird ¹	<i>Euphagus cyanocephalus</i>
brown-headed cowbird ¹	<i>Molothrus ater</i>
northern oriole ¹	<i>Icterus galbula</i>
hooded oriole ¹	<i>Icterus cucullatus</i>
pine siskin ¹	<i>Carduelis pinus</i>
house finch ¹	<i>Carpodacus mexicana</i>
lesser goldfinch ¹	<i>Carduelis psaltria</i>
American goldfinch ^{1,3}	<i>Carduelis tristis</i>
purple finch ¹	<i>Carpodacus purpureus</i>

Table 2
Wildlife Species Known From
Walpert Ridge
Hayward, California

¹Wildlife reported in the Hayward Hills Wildlife Study (City of Hayward 1997), which includes the project site and surrounding areas.

²Sighting by Resource Management International, Inc. (RMI) biologists.

³Sighting by Monk & Associates biologists.

Table 3
Special Status Plants
Potentially Occurring on Project Sites in Alameda County.

Species	Status ¹	Habitat Affinities	Blooming Period
<i>Acanthomintha lanceolata</i> Santa Clara thorn mint	Fed.: None State: None CNPS: List 4	Chaparral (serpentine); coastal scrub.	March - June
<i>Allium sharsmithae</i> Sharsmith's onion	Fed.: None State: None CNPS: List 1B	Cismontane woodland (serpentine).	March - May
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	Fed.: None State: None CNPS: L4	Cismontane woodland; valley and foothill grassland.	March - June
<i>Amsinckia grandiflora</i> Large-flowered fiddleneck	Fed.: C State: SE CNPS: List 1B	Open grassy slopes below 1,200 feet. Valley grassland, inner coast range and adjacent valley.	April - May
<i>Androsace elongata</i> ssp. <i>acuta</i> California androsace	Fed.: None State: None CNPS: List 4	Chaparral; cismontane woodland; coastal scrub.	March - June
<i>Arctostaphylos pallida</i> pallid manzanita	Fed.: C State: CE CNPS: List 1B	Broad-leaved upland forest; chaparral; cismontane woodland (siliceous shale).	December - March
<i>Aspidotis carlotta-halliae</i> Carlotta Hall's lace fern	Fed.: None State: None CNPS: L4	Chaparral; cismontane woodland (serpentine).	January - Dec.
<i>Astragalus tener</i> var. <i>tener</i> alkali mild vetch	Fed.: None State: None CNPS: List 1B	Playas; valley and foothill grassland (adobe clay); alkaline vernal pools.	March - June
<i>Atriplex cordulata</i> heartscale	Fed.: None State: None CNPS: List 1B	Chaparral scrub; valley and foothill grasslands (sandy soils) (saline or alkaline).	May - October
<i>Atriplex coronata</i> var. <i>coronata</i> crownscale	Fed.: None State: None CNPS: L4	Chaparral scrub; valley and foothill grasslands; vernal pools (alkaline).	April - October
<i>Atriplex depressa</i> brittlescale	Fed.: None State: None CNPS: List 1B	Chaparral scrub; playas; valley and foothill grassland (alkaline or clay soils)	May - October
<i>Atriplex joaquiniana</i> San Joaquin spearscale	Fed.: None State: None CNPS: L1B	Chaparral scrub; meadows; valley and foothill grasslands (alkaline soils).	April - September

Table 3
Special Status Plants
Potentially Occurring on Project Sites in Alameda County.

Species	Status ¹	Habitat Affinities	Blooming Period
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> Balsamroot	Fed.: None State: None CNPS: L3	Fields and rocky hillsides. Valley grasslands, foothill woodlands, interior slopes near the San Francisco Bay.	March - June
<i>Blepharizonia plumosa</i> ssp. <i>Plumosa</i> big tarplant	Fed.: None State: None CNPS: List 1B	Valley and foothill grasslands.	July - October
<i>Calochortus umbellulatus</i> Oakland star-tulip	Fed.: None State: None CNPS: List 4	Broad-leaved upland forests; chaparral; lower montane coniferous forest; valley and foothill grassland (serpentine).	March - May
<i>Campanula exigua</i> chaparral harebell	Fed.: None State: None CNPS: List 4	Chaparral (rocky, usually serpentinite).	May - June
<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> San Francisco Bay spineflower	Fed.: None State: None CNPS: List 1B	Coastal bluff scrub; coastal dunes; coastal prairie; coastal scrub (sandy soils).	April - July
<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	Fed.: FE State: None CNPS: List 1B	Cismontane woodland (openings); coastal dunes; coastal scrub.	May - September
<i>Cirsium fontinale</i> var. <i>campylon</i> Mt. Hamilton thistle	Fed.: None State: None CNPS: L1B	Chaparral; cismontane woodland; valley and foothill grassland (serpentine seeps).	April - October
<i>Clarkia breweri</i> Brewer's clarkia	Fed.: None State: None CNPS: List 4	Chaparral; cismontane woodland; coastal scrub (serpentine).	April - May
<i>Clarkia concinna</i> ssp. <i>automixa</i> Santa Clara red ribbons	Fed: None State: None CNPS: L1B	Mesic habitats, north facing slopes. Shaded oak woodland.	April - July
<i>Clarkia franciscana</i> Presidio clarkia	Fed.: FE State: CE CNPS: List 1B	Coastal scrub; valley and foothill grasslands (serpentine).	May - July
<i>Cordylanthus maritimus</i> ssp. <i>palustris</i> Point Reyes bird's beak	Fed.: None State: None CNPS: List 1B	Coastal salt marsh.	June - October
<i>Cordylanthus mollis</i> ssp. <i>hispidus</i> hispid bird's beak	Fed.: None State: None CNPS: L1B	Meadows (alkaline); playas.	June - September

Table 3
Special Status Plants
Potentially Occurring on Project Sites in Alameda County.

Species	Status ¹	Habitat Affinities	Blooming Period
<i>Cordylanthus palmatus</i> palmate-bracted bird's beak	Fed.: FE State: CE CNPS: List 1B	Chaparral scrub; valley and foothill grasslands (alkaline).	May - October
<i>Cryptantha hooveri</i> Hoover's cryptantha	Fed.: None State: None CNPS: List 4	Valley and foothill grasslands (sandy).	April - May
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital canyon larkspur	Fed.: C State: CR CNPS: List 1B	Cismontane woodland (serpentine).	April - June
<i>Delphinium recurvatum</i> recurved larkspur	Fed.: None State: None CNPS: List 1B	Chaparral scrub; cismontane woodland; valley and foothill grasslands (alkaline).	March - May
<i>Dirca occidentalis</i> western leatherwood	Fed.: None State: None CNPS: List 1B	Broad-leaved upland forests; closed cone coniferous forest; chaparral; cismontane woodland.	January - April
<i>Eriogonum luteolum</i> var. <i>caninum</i> Tiburon buckwheat	Fed.: None State: None CNPS: List 3	Chaparral; coastal prairie; valley and foothill grasslands (serpentine).	June - September
<i>Eriogonum truncatum</i> Mt. Diablo Buckwheat	Fed.: None State: None CNPS: 1A	Chaparral, coastal scrub, Valley and foothill grasslands. Dry exposed clay or rock surfaces. Last seen in 1940.	April - September
<i>Eriophyllum jepsonii</i> Jepson's woolly sunflower	Fed.: None State: None CNPS: List 4	Chaparral; cismontane woodland.	May - July
<i>Eschscholzia rhombipetala</i> diamond-petaled California poppy	Fed.: None State: None CNPS: 1A	Valley and foothill grassland. Last seen in 1957.	March - April
<i>Fritillaria agrestis</i> stinkbells	Fed.: None State: None CNPS: List 4	Chaparral; cismontane woodland; valley and foothill grasslands (clay, sometimes serpentine).	March - April
<i>Fritillaria falcata</i> talus fritillary	Fed.: None State: None CNPS: List 1B	Chaparral; cismontane woodland; lower montane coniferous forest (talus, serpentine).	March - May
<i>Fritillaria liliacea</i> fragrant fritillary	Fed.: None State: None CNPS: List 1B	Coastal prairie; coastal scrub; valley and foothill grasslands (often serpentine).	February - April

Table 3
Special Status Plants
Potentially Occurring on Project Sites in Alameda County.

Species	Status ¹	Habitat Affinities	Blooming Period
<i>Galium andrewsii</i> ssp. <i>gatense</i> serpentine bedstraw	Fed.: None State: None CNPS: List 4	Chaparral; cismontane woodland; lower montane coniferous forest (serpentine).	April - July
<i>Grindelia stricta</i> var. <i>angustifolia</i> marsh gumplant	Fed.: None State: None CNPS: List 4	Coastal salt marsh.	August - October
<i>Helianthella castanea</i> Diablo Helianthella	Fed.: None State: None CNPS: 1B	Grassy hillsides, 500-4,000 feet. Valley grasslands; cismontane woodlands, San Francisco Bay Region.	April - June
<i>Hemizonia parryi</i> ssp. <i>congonii</i> Congdon's tarplant	Fed.: C State: None CNPS: List 1B	Valley and foothill grasslands (alkaline soils).	June - November
<i>Holocarpha macradenia</i> Santa Cruz tarplant	Fed.: C State: CE CNPS: List 1B	Coastal prairie; valley and foothill grasslands (often clay).	June - October
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellogg's horkelia	Fed.: None State: None CNPS: List 1B	Closed cone coniferous forest; coastal scrub.	April - September
<i>Lasthenia conjugens</i> Contra Costa goldfields	Fed.: C State: None CNPS: List 1B	Valley and foothill grasslands (mesic); vernal pools.	March - June
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	Fed.: None State: None CNPS: List 1B	Freshwater and brackish marsh.	May - June
<i>Lessingia hololeuca</i> woolly-headed lessingia	Fed.: None State: None CNPS: List 3	Coastal scrub; lower montane coniferous forest; valley and foothill grasslands.	June - October
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	Fed.: None State: CR CNPS: List 1B	Brackish or freshwater marsh; riparian scrub.	April - October
<i>Linanthus acicularis</i> bristly linanthus	Fed.: None State: None CNPS: List 4	Chaparral; cismontane woodland; coastal prairie.	April - July
<i>Linanthus ambiguus</i> serpentine linanthus	Fed.: None State: None CNPS: List 4	Cismontane woodland; valley and foothill grasslands (serpentine).	March - June

Table 3
Special Status Plants
Potentially Occurring on Project Sites in Alameda County.

Species	Status ¹	Habitat Affinities	Blooming Period
<i>Linanthus grandiflorus</i> large-flowered linanthus	Fed.: None State: None CNPS: List 4	Coastal bluff scrub; cismontane woodland; coastal dunes; coastal prairie; valley and foothill grassland.	April - July
<i>Malacothamnus hallii</i> Hall's bush mallow	Fed.: None State: None CNPS: List 1B	Chaparral.	May - September
<i>Micropus amphibolus</i> Mt. Diablo cottonweed	Fed.: None State: None CNPS: List 4	Broad-leaved upland forest; cismontane woodland; valley and foothill grasslands.	April - May
<i>Monardella antonina</i> ssp. <i>antonina</i> San Antonio Hills monardella	Fed.: None State: None CNPS: List 3	Chaparral; cismontane woodland.	June - August
<i>Monardella villosa</i> ssp. <i>globosa</i> robust monardella	Fed.: None State: None CNPS: List 1B	Chaparral (openings); cismontane woodland.	June - July
<i>Myosurus minimus</i> ssp. <i>apus</i> little mousetail	Fed.: None State: None CNPS: List 3	Vernal pools (alkaline soils).	March - June
<i>Phacelia phacelioides</i> Mt. Diablo phacelia	Fed.: None State: None CNPS: List 1B	Chaparral; cismontane woodland (rocky soils). Does plant occur in Alameda County?	April - May
<i>Piperia michaelii</i> Michael's rein orchid	Fed.: None State: None CNPS: List 4	Coastal bluff scrub; closed cone coniferous forest; cismontane woodland.	May - August
<i>Psilocarphus brevissimus</i> var. <i>multiflorus</i> Delta woolly marbles	Fed.: None State: None CNPS: List 4	Vernal pools.	May - June
<i>Ranunculus lobbii</i> Lobb's aquatic buttercup	Fed.: None State: None CNPS: List 4	Cismontane woodland; valley and foothill grasslands (mesic); vernal pools.	March - May
<i>Sanicula maritima</i> adobe sanicle	Fed.: None State: Rare CNPS: List 1B	Chaparral; coastal prairie; meadows; valley and foothill grasslands (clay, serpentine).	April - May
<i>Streptanthus albidus peramoenus</i> most beautiful jewelflower	Fed.: C State: None CNPS: 1B	Serpentine outcrops; Chaparral.	April - June

Table 3
Special Status Plants
Potentially Occurring on Project Sites in Alameda County.

Species	Status ¹	Habitat Affinities	Blooming Period
<i>Sueda californica</i> California seablight	Fed.: PE State: None CNPS: 1B	Coastal salt marsh.	July - October
<i>Trifolium amoenum</i> showy Indian clover	Fed.: PE State: None CNPS: 1B	valley and foothill grasslands (sometimes serpentine).	April - June
<i>Tropidocarpum capparideum</i> caper-fruited tropidocarpum	Fed.: None State: None CNPS: 1A	Valley and foothill grassland with alkaline soils. 0-500 ft. Last seen in 1957.	March - April

2. Status Designations:

- FE Federal listed Endangered Species
- SE State listed Endangered Species
- FT Federal listed Threatened Species
- ST State listed Threatened Species
- C Federal Candidate Species. Data are sufficient to support listing as threatened or endangered.

List 1A CNPS designation. Plants presumed extinct in California. Species with this listing meet the definitions of Section 1901, Chapter 10 of the CDFG Code and are eligible for State listing.

List 1B CNPS designation. Plants rare, threatened, or endangered in California and elsewhere. Species with this listing meet the definitions of Section 1901, Chapter 10 of the CDFG Code and are eligible for State listing. Also, likely to meet biological criteria to be classified as rare under CEQA (Section 15380(b)).

List 2 CNPS designation. Plants rare, threatened, or endangered in California, but more common elsewhere. Species with this listing meet the definitions of Section 1901, Chapter 10 of the CDFG Code and are eligible for State listing.

List 3 CNPS designation. Plants about which more information is necessary. A review list.

List 4 CNPS designation. A watch list for plants of limited distribution in California.

Table 4
Special Status Animals Potentially Occurring¹ on
the Blue Rock Country Club Project Site
Alameda County, California

Species	Status ²	Typical Habitat ³	Would Further Surveys be Necessary?	Significance of Impacts
Winter-run chinook salmon <i>Oncorhynchus tshawytscha</i>	USFWS: FE CDFG: SE	Clean, cold water over gravel beds for successful spawning and egg incubation.	No. No suitable habitat on the project site.	No impact.
Delta smelt <i>Hypomesus transpacificus</i>	USFWS: FT CDFG: ST	Open, surface waters of the Delta and Suisun Bay. Spawn between February and June.	No. No suitable habitat on the project site.	No impact.
Central California steelhead <i>Oncorhynchus mykiss</i>	USFWS: FPE CDFG: CSC	Spawn in cool, clear, well-oxygenated water, greater than 18 cm deep..	No. No suitable habitat on the project site.	No impact.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	USFWS: FPT CDFG: CSC	Primarily freshwater fish but tolerant of moderate salinities; found in slow-moving sections of rivers and sloughs.	No. No suitable habitat on the project site.	No impact.
coho salmon - Central CA Coast <i>Oncorhynchus kisutch</i>	USFWS: FT CDFG: CSC	Clean, cold water over gravel beds for successful spawning and egg incubation.	No. No suitable habitat on the project site.	No impact.
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	USFWS: FT CDFG: None	Vernal pools and seasonal wetlands of the Central Valley and coast ranges.	No. No suitable habitat. Water ponds on the site only for one or two days following large storm events, then quickly drains.	No impact.
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	USFWS: SC CDFG: None	Found in calm, shallow water of ponds, streams, marshes, or lakes. Only known from immediate San Francisco Bay area.	Maybe. Ponds on project site may provide suitable habitat.	Potential impact..

Table 4
Special Status Animals Potentially Occurring¹ on
the Blue Rock Country Club Project Site
Alameda County, California

Species	Status	Typical Habitat	Would Further Surveys be Necessary?	Significance of Impacts
California tiger salamander (<i>Ambystoma californiense</i>)	USFWS: C CDFG: CSC	Annual grasslands, valley foothill hardwood habitats, vernal pools and seasonal wetland habitats for breeding.	No. Was not identified during 1996 surveys (RMI 1996). Site is too wooded for this species.	No impact.
California red-legged frog (<i>Rana aurora draytoni</i>)	USFWS: FT CDFG: CSC	Perennial stream courses and ponds with emergent and/or riparian vegetation.	No. Has been identified on the project site.	Significant.
Foothill yellow-legged frog (<i>Rana boylei</i>)	USFWS: SC CDFG: CSC	Shallow-flowing water in small streams with rocky or cobble substrate.	No. Ponds and drainages on the project site do not provide suitable habitat.	No impact.
western pond turtle (<i>Clemmys marmorata</i>)	USFWS: SC CDFG: CSC	Fresh or brackish, permanent or intermittent water bodies such as, creeks, ponds.	No. Was not identified during appropriately timed surveys in 1996 (RMI 1996).	No impact.
California horned lizard (<i>Phrynosoma coronatum frontale</i>)	USFWS: SC CDFG: CSC	Inhabit open country, especially sandy areas, washes, flood plains, and wind-blown deposits in a wide variety of habitats, including conifer and riparian habitats.	No. Sandy soils or other open habitat is not provided by the project area, and it is not expected to occur within the project area.	No impact.
Alameda Whipsnake (<i>Masticophis lateralis euryxanthus</i>)	USFWS: ST CDFG: CSC	Confined to coastal scrub and chaparral habitats.	No. Already identified on the project site.	Significant.
San Joaquin Valley woodrat (<i>Neotoma fuscipes riparia</i>)	USFWS: C CDFG: CSC	Prefers evergreen riparian communities where it builds large stick nests either on the ground or in the trees.	No. Project site is outside this species' known range, and it is not expected to occur within the project site.	No impact.

Table 4
Special Status Animals Potentially Occurring¹ on
the Blue Rock Country Club Project Site
Alameda County, California

Species	Status	Typical Habitat	Would Further Surveys be Necessary?	Significance of Impacts
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes annectens</i>)	USFWS: SC CDFG: CSC	Prefers evergreen riparian communities where it builds large stick nests either on the ground or in the trees.	Yes. One stick nest identified just outside the project site. May be other stick nests onsite; preconstruction surveys necessary.	Potentially Significant
greater western mastiff bat (<i>Eumops perotis californicus</i>)	USFWS: SC CDFG: CSC	Uncommon resident that typically uses crevices in cliffs, high buildings, trees, and tunnels for roosting.	Yes. Range extends into Alameda County. Pre-construction surveys would be necessary. See text.	Potentially significant.
Pacific western big-eared bat (<i>Plecotus townsendii townsendii</i>)	USFWS: SC CDFG: CSC	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting and for maternity sites.	Yes. Pre-construction surveys would be necessary. See text.	Potentially significant.
myotis bats ⁴ (<i>Myotis</i> spp.)	USFWS: SC CDFG: CSC	Myotis prefer open woodland and forest habitats with trees, buildings, crevices, or caves for roosting and hibernacula.	Yes. Pre-construction surveys. These species of Myotis are found in Alameda County. See text.	Potentially significant.
salt marsh harvest mouse (<i>Reithrodontomys megalotis</i>)	USFWS: FE CDFG: SE	Tidally influenced salt marsh with pickleweed and alkali heath for cover.	No. No suitable habitat on the project site.	No impact.
California brown pelican (<i>Pelecanus occidentalis californicus</i>)	USFWS:FE CDFG: SE	Found in estuarine, pelagic, and marine tidal waters off the coast. Breeds on the Channel Islands.	No. Habitat on the project site is not suitable.	No impact.
black rail (<i>Laterallus jamaicensis</i>)	USFWS:SC CDFG: ST	Yearlong resident of saline, brackish, and fresh emergent wetlands in the Bay Area.	No. Habitat on the project site is not suitable.	No impact.

Table 4
Special Status Animals Potentially Occurring¹ on
the Blue Rock Country Club Project Site
Alameda County, California

Species	Status	Typical Habitat	Would Further Surveys be Necessary?	Significance of Impacts
California clapper rail (<i>Rallus longirostris obsoletus</i>)	USFWS: FE CDFG: SE	Year long resident in coastal wetlands and brackish areas around the Bay Area.	No. Habitat on the project site is not suitable.	No impact.
California least tern (<i>Sterna antillarum browni</i>)	USFWS: FE CDFG: SE	Migratory. Arrives in Bay Area in May. Breeds in abandoned salt ponds and along estuarine shores.	No. Habitat on the project site is not suitable.	No impact.
western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	USFWS: FT CDFG: CSC	Common on sandy marine and estuarine shores. Nests in same habitats and on salt pond levees.	No. Habitat on the project site is not suitable.	No impact.
American peregrine falcon (<i>Falco peregrinus anatum</i>)	USFWS: FE CDFG: SE	Nests on cliffs. Hunts in expansive, open habitats.	No. No suitable nesting habitat within the project site.	No impact.
bald eagle (<i>Haliaeetus leucocephalus</i>)	USFWS: FT CDFG: SE	Nests in tall trees or snags near large water bodies for fishing.	No. No suitable nesting habitat within the project site.	No impact.
golden eagle (<i>Aquila chrysaetos</i>)	USFWS: None CDFG: CSC	Hunts in open, expansive grassland savannah. Nests on cliffs or in tall trees in prominent locations.	Yes. Spring nesting surveys the year of proposed construction.	Potentially significant.
ferruginous hawk (<i>Buteo regalis</i>)	USFWS: SC CDFG: CSC	A fall migrant to California; forages open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys.	No. Does not nest in California, and loss of foraging habitat is not significant.	No impact.
Cooper's hawk (<i>Accipiter cooperii</i>)	USFWS: None CDFG: CSC	Nests in mature oak woodland near springs, creeks, and other water.	Yes. Spring nesting surveys. See text.	Potentially significant.

Table 4
Special Status Animals Potentially Occurring¹ on
the Blue Rock Country Club Project Site
Alameda County, California

Species	Status	Typical Habitat	Would Further Surveys be Necessary?	Significance of Impacts
sharp-shinned hawk (<i>Accipiter striatus</i>)	USFWS: None CDFG: CSC	Nests in heavily wooded areas, sometimes near springs or creeks.	Yes. Spring nesting surveys. See text.	Potentially significant.
northern harrier (<i>Circus cyaneus</i>)	USFWS: None CDFG: CSC	Nests on the ground in grassland, meadows, or open range land. Hunts over open ground.	Yes. Spring nesting surveys. See text.	Potentially significant.
white-tailed kite (<i>Elanus leucurus</i>)	USFWS: None CDFG: FP	Nests in medium sized bushes or low trees. Hunts in open grassland.	Yes. Spring nesting surveys. See text.	Potentially significant.
burrowing owl (<i>Athene cunicularia</i>)	USFWS: SC CDFG: CSC	Open, dry, nearly or quite level, grasslands. Dependent upon ground squirrels and other burrowing animals.	Yes. Pre-construction surveys. See text.	Potentially significant.
tricolored blackbird (<i>Agelaius tricolor</i>)	USFWS: SC CDFG: SCS	Nests in cattails, tules, blackberry bushes or thistle patches adjacent to water	Yes. Spring nesting surveys. See text.	Potentially significant.
salt marsh common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	USFWS: SC CDFG: SCS	Found in dense vegetation surrounding fresh and salt/brackish water marshes of San Francisco + San Pablo Bays.	No. No suitable habitat on the project site.	No impact.
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	USFWS: SC CDFG: SCS	Brackish water marshes with cattails, bulrushes, and/or pickleweed.	No. Habitat on the project site is not suitable for this species.	No impact.
Bell's sage sparrow (<i>Amphispiza belli belli</i>)	USFWS: SC CDFG: SCS	Seeks cover in chaparral and scrub habitats. Marked preference for chamise. Nests in dense brush.	No. No chaparral or chamise on the project site.	No impact.

Table 4
Special Status Animals Potentially Occurring¹ on
the Blue Rock Country Club Project Site
Alameda County, California

little willow flycatcher (<i>Empidonax traillii brewsteri</i>)	USFWS: SC CDFG: SCS	Breeds in riparian and mesic upland thickets. This subspecies breeds almost anywhere its habitat requirements are met (Grinnell and Miller 1944).	No. Riparian vegetation will not be impacted under the May 23, 1997 Development Plans.	No impact.
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1. Adapted from the California Department of Fish and Game's Natural Diversity Database records (1997), and U.S. Fish and Wildlife Service's May 9, 1997 letter to Mr. H. Hom of the City of Hayward's Development Review Services Division.

2. Status Designations:

- FE Federal listed Endangered Species
- SE State listed Endangered Species
- FT Federal listed Threatened Species
- ST State listed Threatened Species
- FPE Proposed for listing as endangered under the Federal Endangered Species Act of 1973.
- FPT Proposed for listing as threatened under the Federal Endangered Species Act of 1973.
- C Federal Candidate for listing as Endangered or Threatened. Data are sufficient to support a listing proposal.
- SC Federal Species of Concern. Not enough data to support a listing proposal. Further field study and research needed.
- CSC California Department of Fish and Game (CDFG) Species of Special Concern.

³Habitat information from CNDDDB. 1997; Hall. 1981; Williams and Basey. 1986; and Zeiner et al. 1990.

⁴Species of myotis bats listed by USFWS as potentially occurring within the Hayward quadrangle includes *Myotis ciliolabrum*, *M. evotis*, *M. thysanodes*, *M. volans*, and *M. yumanensis*.

APPENDIX D

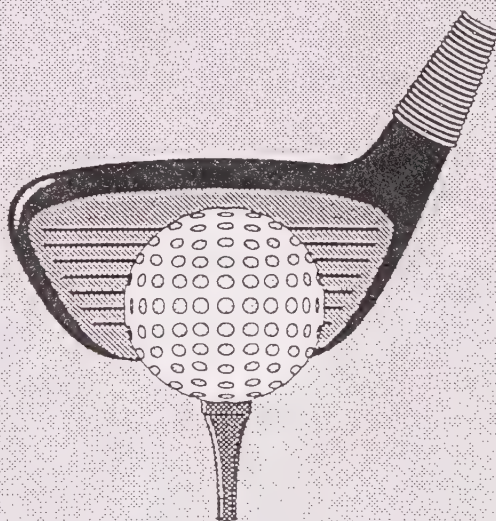
SUPPLEMENTAL PUBLIC SERVICES INFORMATION (Proposed Fire/Emergency Medical Services Mitigation Plan)

Fire/Emergency Medical Services Mitigation Plan

for

Blue Rock Country Club Project

City of Hayward



May 21, 1997

By:

*Hunt Research Corporation
P. O. Box 291
Solvang, California 93464
(805) 688-4625*

SIGNATURE PAGE

This plan is hereby agreed to and approved as encompassing all City of Hayward requirements for Fire Protection and Emergency Medical Services. Approvals are subject to review and approval of detailed submittals in support of this plan. Any variances from this plan, due to engineering difficulties, or other unforeseen constraints, shall be submitted to the Fire Chief for review and approval.

_____ Date: _____
For Hayward 1900, Inc.

_____ Date: _____
For Hayward Fire Department

_____ Date: _____
For City of Hayward; City Manager

FIRE/EMERGENCY MEDICAL SERVICES MITIGATION PLAN
BLUE ROCK COUNTRY CLUB PROJECT
CITY OF HAYWARD

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1. Introduction:

Hayward 1900, Incorporated, with the Diocese of Oakland, proposes to construct 650 homes in the Walpert Ridge area of Hayward. The name of the project is the "Blue Rock Country Club". The Project is an upscale, suburban residential project with an integrated golf course. The homes will be constructed on a 1,633 acre site within the Walpert Ridge Specific Plan. The developed residential area amounts to approximately 145 acres (10%) of the land. Open space amounts to approximately 1,100 Acres (86%) of the land. The lot sizes range from 5,000 square feet to over 10,000 square feet. The average size house will be approximately 2,600 square feet. Net construction density per acre ranges from 8.7 units to 4.3.

The project includes 32,500 square feet of commercial uses which include a golf course, tennis club, country club and restaurant. In addition, there is a school site, a park, and open space. The largest structure is the school. It is a 54,794 square foot Type Five 1 hour building.

The project is in the response area of Hayward Fire Station # 5. Station 5 is located at 28595 Hayward Blvd. The furthest location of habitable structures in this project is 1.6 miles from Station 5 via public and private roads. The second closest station is Hayward Station 8 at 24200 Fairview Road. The closest ambulance responds from Tennyson Avenue; a 10 minute response.

The purpose of this plan is to reflect the agreed upon fire protection and Emergency Medical Services mitigations for this project, based upon the 1.6 mile response distance.

The project is in the Urban/Wildland Interface area of Hayward. The optimum approach to the mitigation of fire risks in such areas is to "fight the fire on the drawing board" by providing passive (built in) fire protection. To simply rely on the fire department to respond with an army of firefighters and equipment, to an unsprinklered risk, is akin to "closing the door after the horse is out of the barn". In fact, the traditional approach to community fire protection, which involves relying solely on response after ignition is an after-the-fact reactive mode of community fire protection. Failure to mitigate the fire problem to a reasonable degree on the drawing board is an antiquated approach to community fire protection, and results in excessive direct and indirect fire protection costs to the community.

State of the art advances in passive built in fire protection safeguards, systems and adequate vegetation management, are the preferred approach in dealing with interface and intermix fires. Reliance upon traditional manual firefighting efforts, as delivered by the fire department, notwithstanding the quality of such service, leaves too much to chance in this type of fire.

The Hayward Fire Department has recognized this problem and has promulgated intensified high fire hazard construction requirements for new developments

located within the Wildland/Urban interface. Recent major fires in California have demonstrated the value of these construction features, as well as residential fire sprinkler systems and vegetation management. No fire department can adequately defend structures during a significant wildland fire, if those structures do not have adequate built in protection and adequate vegetation management. In fact, the latest trend is to "triage" unprotected structures during the fire, and not assign fire units to attempt to protect such structures.

The Hayward Fire Department is a good fire department. In addition, California has the best mutual aid fire response system in the country. Hundreds of fire crews can be placed on a wildland fire in a matter of hours. However, as seen in Berkeley, Santa Barbara County, Los Angeles County and Orange county, this large armada of trained firefighters and modern equipment cannot save unprotected structures. This has been proven time and time again.

The answer for the future is built in/passive structural protection, and vegetation management. In other words, protection of the type which is proposed for this project. The primary strategic objective at most wildland/urban interface fires is structural protection. With proper structural protection, and vegetation management, a smaller force of fire personnel can allow the fire to burn out to specified control, or "anchor", points. In order to lessen the requirement for fire stations and personnel, the structural fire problem must be mitigated. The result is that the structures will protect themselves, and people may shelter in place rather than having to evacuate. This relieves the fire department forces from having to commit crews to defend structures. This will result in a lessened requirement for massive response to such incidents to provide structural protection.

Notwithstanding the wildland fire threat, most fire and life loss occurs within the home. Most of these fires occur in bedrooms and kitchens. They are usually caused by smoking, or involve heating appliances and electrical malfunctions. Thus, the built in protection must address and mitigate the internal and the external fire threat. The internal fire threat is constant. The external threat is only during a few weeks every year.

The requirements as set forth in this section of the plan serve to mitigate the internal and external fire threats to a reasonable and acceptable degree. Projects which incorporate and maintain such features are on the cutting edge of creating the fire safe communities of the future. The resulting impact on community fire protection is that of creating an entirely new paradigm relating to the configuration of fire departments. The fire department of the future will be primarily oriented towards intensified fire protection planning, fire prevention, inspection of occupancies, support of fire protection systems and public education. The bulk of their calls will be related to providing Emergency Medical and Hazardous Materials mitigation services.

Firefighting in new, properly protected, communities will be relegated to the

functions of providing support of fire protection systems, and of directly controlling wildland fires. The primary, day to day fire impact will continue to be in the older, unprotected risks which are usually in or near the downtown areas.

It is therefore the objective of the protection set forth in this plan to provide a fire safe community which creates no additional fire impact upon the existing fire department, and to mitigate the remaining issue of Pre Hospital Emergency Medical Services (EMS). Interestingly, as a result of the ongoing efforts of fire departments such as Hayward, the fire problem has already been reduced significantly in most communities. The vast majority (75% or more) of emergency calls now responded to by fire departments are EMS calls. Conversely, when the author of this plan joined the fire service in the early 1960's, most fire departments did not respond to medical calls. They were too busy going to fire calls, because fire prevention was not a priority, and modern safeguards were not being required.

The changing picture in community fire protection results in the need for fire departments to re-evaluate their traditional priorities and response standards, so that they reflect the incident profile of today, and of the future.

2. Structural Fire Protection:

All structures in this project will comply with the City of Hayward building construction standards for fire protection as set forth in the "City of Hayward Hillside Design and Urban/Wildland Interface Guidelines." Those requirements are as described for category #1 and 2 structures. Category #1 structures have maximum built in fire protection measures due to nearby unlandscaped, unirrigated areas or unirrigated unmodified golf course areas, steep slopes or wildland fuel loading. Category 2 structures are defined as structures located in the balance of the wildland/urban interface, or those facing properly landscaped and irrigated golf courses. Structures in category 2 areas will comply with the California Fire Safe Guidelines. The author of this plan has added some recommended safeguards, based upon 33 years experience in Wildland/Urban fire fighting and fire protection planning. These are highlighted and followed by "ed." The following measures will be implemented based upon location of the structure within a particular category:

A. Setbacks: (category 1)

Structures shall be set back 30' from property line. Structures shall have a distance of 20' or more between them. Structures with less than 20' or 30' shall have 2 hour rated exterior walls, stucco exteriors and listed fire shutters on the facing walls.

B. Roof eaves: (category 1)

Properly enclose all roof eaves to building department approval.

C. Glazing: (category 1)

Provide double paned windows for exterior windows, including windows in doors (ed.). Tempered glass may be utilized in sliding glass doors (ed.). Skylights shall be tempered or double pane (ed.)

D. Exterior walls facing wildland: (category 1)

One hour fire rated walls on the exterior sides of structures which directly face the wildland areas. Such walls are on perimeter houses only. Exterior doors for those houses to be non combustible or solid core wood not less than 1 3/4" thick, or have a 20 minute fire rating. Garage doors to be non combustible. (ed.)

E. Fencing: (category 1)

Rear yard fences, or fences on any side directly abutting the unmodified wildland within 10' of structures, on perimeter lots, to be wire mesh or non combustible. Fencing on perimeter lots to have a gate on wildland side. Street number to be on fence(ed.). Any fencing on perimeter lots at the top of a slope to be wire mesh or non combustible.

F. Roof systems: (category 1 and 2)

Class "A" rated roof systems per state building code. No wood shake or treated wood shake within the roof system, or on sides of structure. Ends of any Spanish tile roofs on category 1 homes to be enclosed to prevent bird nesting.(ed.)

G. Attic vents: (category 1 and 2)

Provide metal enclosures with 1/4" mesh screens on all attic vents(side attic and basement vents. Aim vents away from wildland areas. No vents in eaves.(ed.)

H. Spark arrestors (category 1 and 2)

Provide spark arrestors with 1/4" mesh screens on all chimneys and barbecues having stacks. The arrestor shall be visible from grade level (ed.). Note that the State Fire code specifies mesh of 1/2" or less.(ed.). Fire department will inspect for arrestors.

I. Fire sprinkler systems: (category 1 and 2)

Fully sprinkler all structures (including garages, attics (ed.) and support facilities) with residential sprinkler systems installed by a C-16 certified contractor. Systems shall comply with NFPA 13-D. The system shall utilize a 4 sprinkler head flow calculation. Flow to be 52 gpm. 3/4 pipe may be utilized where allowed in NFPA 13-D. The meter shall be a 1" meter. Heads shall also be installed in integral porches or patios which are part of, and attached to the structure (ed.). Two replacement heads and a sprinkler wrench shall be provided. Approved self- contained water supplies, which comply with NFPA 13-D, may be utilized, as long as a fire department connection is provided. Any exterior sprinkler systems utilized to reduce spacing between structures shall comply with NFPA 13.

J. Exterior decks and patio covers: (category 1 and 2)

Construct exterior decks with heavy timber or non combustible materials, and enclose all sides with a one- hour fire rated material. No storage allowed under the deck. Construct any patio covers of heavy timber or non combustible material (no light weight, easily ignited materials. ed.)

K. Structural addressing: (category 1 and 2)

Clearly address all habitable structures at the curb and on the structure or facility per fire department specifications. Numbers to be clearly visible and legible from the street. Numbers to be on contrasting background (ed.).

L. Outdoor storage: (category 1 and 2)

Restrict outdoor storage of firewood, kindling or compost material within 30' of any structure, unless the material is stored in an approved bin or enclosure.

M. Location of chimneys: (category 1 and 2)

Locate chimneys at least 10' away from existing tree canopies. New vegetation of any type shall be at least 10' from chimneys.

Note: The fire department should inspect items A-L annually for compliance.

3. Fuel Management Program:

A fuel management program will be established for this project, as required by the City's Urban/Wildland Interface Guidelines. The program will be developed by Mr.

Don Perry, with assistance as needed by this author. A comprehensive Fuel Management Plan will be submitted to the city for review and approval. The plan will include the following components:

- A. Homeowner education utilizing an approved informational booklet prepared by the developer, to approval of the Fire Department.
- B. Shaded Fuelbreaks
- C. Mosiac Islands
- D. Fire resistant and drought tolerant landscaping
- E. Fuel management zones:

The size of the FMZ's and the intensity of the vegetation management within such zones will be described in the final, detailed fuel management plan to be designed by Mr. Don Perry and submitted to Fire Department for approval. Refer to the Walpert Ridge Specific Plan for discussion and illustrations.

Identification of Fuel Management Zones, mostly on the perimeter of the project, and including defensible space around structures. Proposed widths are a minimum of 30' defensible space plus additional zones required by the Fire Department, based upon the final, detailed, fuel management plan. Adequate clearance of from 10' to 30', dependent upon slope, will be provided on each side of roads. At this point, the conceptual fuel management zones (FMZ) are:

- Structures set back 30' from property line.
- The first 30' from structures, on private lots, shall be the minimum defensible space plus the following:
 - 30' additional FMZ for grassy areas upslope;
 - 70' additional FMZ for grassy areas downslope (total 100' from structure);
 - 70' additional for oak woodland shaded fuelbreak and riparian areas (total 100' from structure);
 - 100' from property line for brush areas (total 130' from structures);
 - 170' from property lines in Tract numbers G and A (200' total from structures).

Areas of open space exceeding 20% slope may require fuel management beyond the extent described herein. Common areas within tracts, emergency access roads and fire truck access will also require fuel management. In addition, areas around power poles and towers will require fuel management in compliance with existing local and state codes.

F. Enforcement, annual inspection and maintenance:

Provision for enforcement of the fuel management plan will be included in the C, C and R's. Ongoing annual maintenance will be provided for through the Homeowners Association, and the golf course management. An annual fire inspection will be conducted, prior to fire season, by the fire department. (ed.)

G. Provision for enforcement of the city requirements on private lots and common or open space, by the fire department.(Ed.)

4. Water Supply:

Fire flow will be 2,010 gpm at 20 psi, for 2 hours per Fire Department requirements. The system design, by the project engineer, will be designed to provide for adequate pressure for sprinkler systems. In concept, the minimum main size will be 6", and larger where necessary to provide fire flow and peak domestic demand at proper pressures and acceptable velocities, per American Water Works Association (AWWA) standards. The system will be a looped system supplied by an elevated tank, providing fire flow without need for fire pumps. Fire flow and duration is calculated in addition to peak domestic flow and storage requirements. The fire flow can provide the equivalent of a flow of 52 gpm from each of 10 sprinkler systems, in addition to 1,490 gpm in hose lines from fire engines. The amount of water stored for fire protection will be 241,200 in addition to peak domestic demand. Provision shall be made to maintain at least 241,200 in tank for fire protection at all times.

Fire hydrants will be located on intervals of 500' or less.

5. Road Patterns:

A. Project Roads:

Road patterns will comply with City of Hayward road standards, with any modifications to maintain fire department clearances. In concept, road grades will be less than 12%, except for short segments of 15% where necessary. Roads will have a minimum unobstructed drivable width (unobstructed by parking) of 24' per city standards. This allows for two traffic lanes. Cul-de-sacs will be 80' in diameter and less than 600'. Turning radii on corners will be to city standards, in order to allow fire apparatus to negotiate corners without backing up.

B. Emergency Vehicle Access (EVA):

EVA's will be provided as follows:

1. Around electrical tower on road to Tract G in the event high winds cause power lines to block main road.
2. From Tract E & F to main project entrance outside of the main gate.

EVA's will have annual vegetation modification and will be 20' wide paved roads. In areas where slopes are too steep to allow 20', a 14' EVA will be provided with an additional 6' of width every 500' for fire truck turnouts. Such turnouts will be 50' in length.

C. Fire Truck Access Points:

Fire truck access points will be provided every 1,000 to 1,200' between perimeter houses in Category I areas. They will be provided where such houses abut unmodified and unirrigated vegetation. They are not provided where houses abut irrigated property landscaped golf courses. These points are to be non paved, all weather surface, with annual vegetation management, by the HOA.

6. Gates:

Public roads will not be gated. Any gates provided with the project will be inset 30' from intersecting roads. Such gates will open to at least a 14' by 13'6" high drivable width and be of a chain driven, sliding design. Gates will be equipped with electrical key pad and knox key lock. Gates will be easily openable in the event of a power outage. Gates will be equipped with "Opticom" electronic activation device, or approved equivalent, operable from entrance and exit lanes. Gated area to be illuminated.

7. Fire Department Response:

The closest fire station is fire station #5, located at 28595 Hayward Blvd. This station is located within 1.6 driving miles of all residential structures in this project. This station operates one Engine company with 3 firefighters. The firefighters are Emergency Medical Technicians. This station has one call every three days, on average. Most of these calls are for medical emergencies. This is a very slow fire station compared to other fire stations in the city. This is due to the type of structures and occupants in the local area. The next closest fire station is Hayward station #8, at 24200 Fairview. Station 8 has 1.5 calls per day. For comparison, stations 1 and 2, downtown, each respond to approximately 8 calls per day. Thus, station 5 responds to a call volume which amounts to 8% of station 1's or 2's call volume. The average Hayward station responds to about 5 calls per day, as compared to station 5's 1/3 call per day.

The closest Paramedic ambulance is located approximately 10 minutes from the project. The unit is a private ambulance operated by AMR. The fire chief estimates

that engine 5, at station 5, will become a paramedic engine company in the next few years.

As is typical for urban areas, 75% of emergency calls in Hayward are for medical emergencies. Approximately 10% are for actual fires, including trash fires, vegetation and vehicle fires. Of the 10%, few are significant structural fires.

In order to determine a reasonable response standard for a highly protected suburban project such as this one, site specific risk management criteria should be utilized.

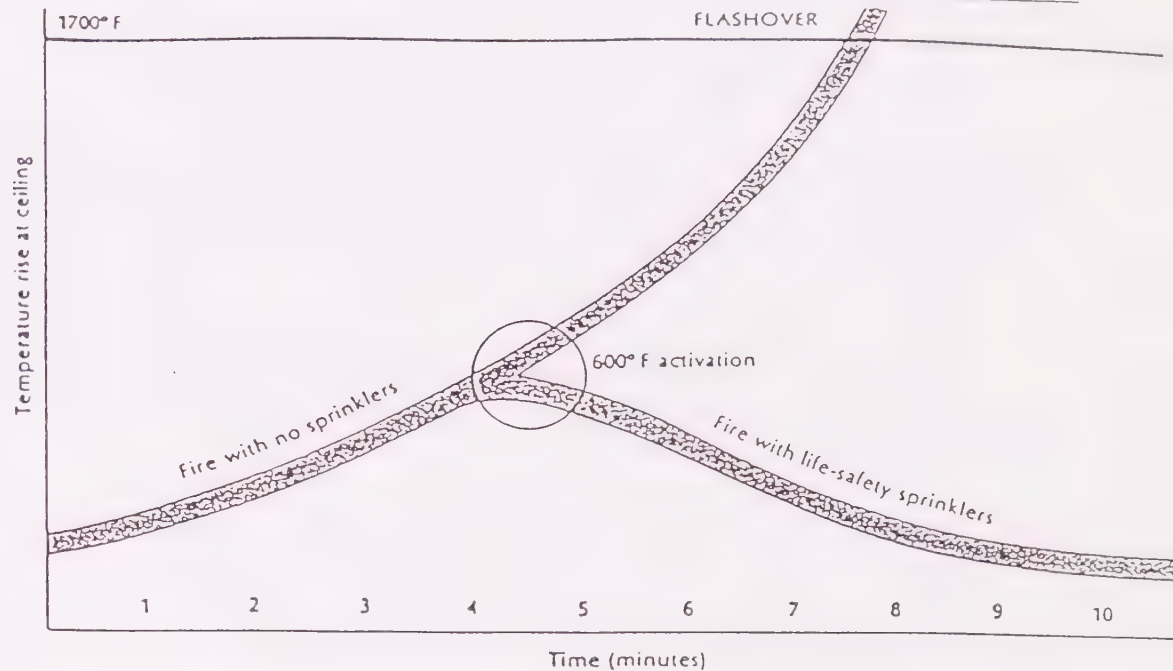
The traditional response standard for placement of fire companies is based upon the need to arrive at a fire prior to flashover, or total fire involvement in the room of fire origin. Flashover may occur at approximately 5 to 8 minutes after ignition, when temperatures reach 1,000 to 1,700 degrees. The exact time and temperature at which flashover occurs depends on the type of combustibles involved. The objective of the fire department is to arrive on the scene, manually move hoselines into the fire building and apply water on the fire prior to flashover occurring.

Fire departments generally utilize a standard of 3 to 4 minutes driving (response) after 2 minutes have elapsed while receiving the alarm and mobilizing. The total elapsed time is about 6 minutes. Hayward uses a 5 minute response time which includes 3 minutes travel time. The problem is that there is a period of time which is not controllable by manual firefighting. That is the period which includes ignition, detection and alarm. In addition, 2 or more minutes are required to set up hose lines and equipment for the fire suppression action, after arrival. The total time from ignition to set up is called "reflex time". Refer to the figure on the next page. Reflex time may vary, up to 30 to 45 minutes, based upon the uncontrolled components of ignition, detection and alarm.

As fire departments traditionally did not attempt to control and reduce the time from ignition to alarm at the dispatch center, the fire department response standards were reactive, rather than proactive. They began at time of alarm receipt by the emergency dispatcher. Thus, stations had to be located so as to provide a 1.5 mile driving distance to built upon areas, because they were already behind the "power curve" of reflex time. 1.5 miles equates to about a 3 to 4 minute driving time at 30 mph. Fire Departments commonly utilize a response standard of 90% compliance. In other words, the objective is to meet their standard 90% of the time.

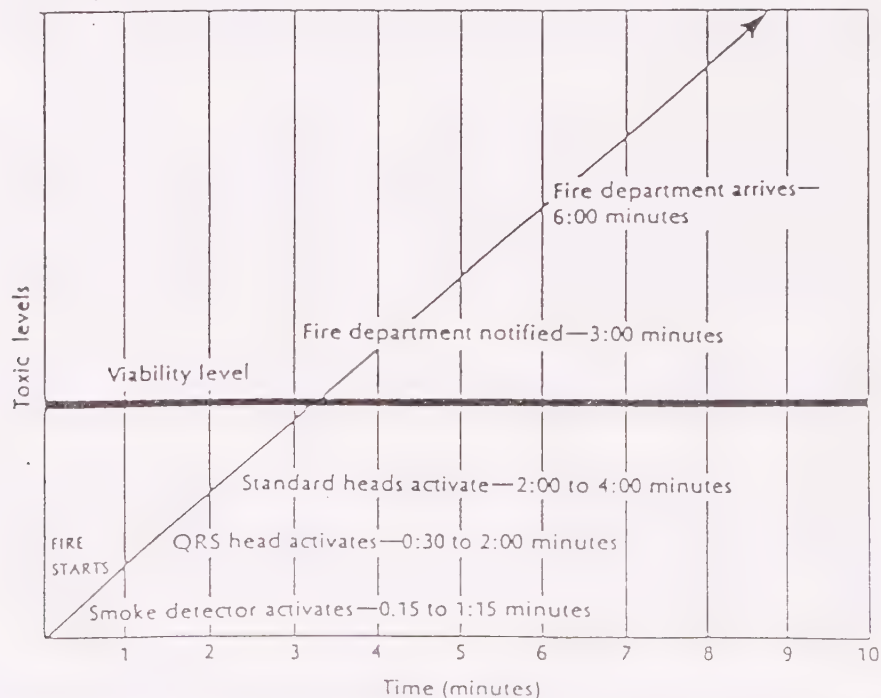
Station locations are only one component of the fire protection delivery system, and are reactive rather than proactive. The important, proactive, components of reflex time include fire prevention, fire sprinklers, construction, vegetation management and public education. The Hayward Fire Department has placed increased emphasis on these critical components, in order to become more proactive.

This chart illustrates the relationship between temperature rise in a structure and the various aspects to fire department response. Research shows that a fire can reach flashover in 7–8 minutes after open-flame production begins. This chart shows the point in the temperature rise where the life-safety system intervenes in the fire's growth. (Courtesy Public Technology, Inc.)



Ignition	Detection	Alarm	Fire department response time			Fire suppression
			Get out	Actual run time	Set up	
Time varies			Goal: less than 4 minutes			Time varies

This reflex-time chart shows the relationship between time and the production of combustion products. In a fire lasting 6 minutes, a person's life can be endangered within the first four minutes. Automatic sprinklers, properly installed and maintained, can intervene before a person's life is endangered. (Courtesy Public Technology, Inc.)



The Insurance Services Office (ISO) developed response standard of 1.5 miles for the first arriving engine company years ago to rate the old commercial downtown areas and industrial areas of cities regarding their susceptibility to fire conflagration (fire spreading from building to building). The purpose of the ISO standard is not to protect lives or to protect individual dwellings. No consideration was given to fire sprinklers. Now, when ISO rates a city, they consider any sprinklered building as presenting no greater risk than a vacant lot. In other words, after many years of actual loss experience, ISO determined that a sprinklered structure, regardless of occupancy type, presents no risk to the community, as the fire is extinguished automatically in the room of origin before the fire spreads throughout a building, or to an adjoining building. The required fire flows determined by ISO for communities are for nonsprinklered buildings only. In fact, for sprinklered buildings, ISO only requires enough water to supply the sprinkler system, as set forth in the sprinkler design standard. This is done in lieu of requiring massive amounts of fire flow, applied manually to the outside of a building which is already lost to the fire. The objective at this point, with a non sprinklered building, is to try to keep the fire in the building of origin.

Typical Fire department standards are necessarily intended for application in areas of varying types of existing occupancies. These occupancies range from residential to industrial. The standards do not consider the value of fire sprinkler systems in preventing flashover and in preventing toxicity above the viability level in fires (refer to the reflex time chart shown on Page 10). Many standards predate the proliferation of fire sprinkler ordinances.

Many Fire departments have not kept up with ISO's changed philosophy regarding sprinklered communities. Fire departments need to create and adopt new standards that consider and reward highly protected risks, as the insurance industry does. Fire sprinklers are proven to be the greatest fire protection tool. Sprinklers are akin to having a firefighter in the ceiling in every room, 24 hours per day! They are almost 100% effective in extinguishing or controlling fire.

The next great advance in fire protection is the smoke detector. The combination of sprinklers and smoke detectors is responsible for a dramatic drop in fire and life loss in residential occupancies in recent years. These advances, the implementation of requirements such as imposed upon this project, and intensified public education will reduce community residential fire and life losses to a minimal, reasonably acceptable and cost effective level.

8. Standard For Highly Protected Suburban Risks:

This plan reflects the fire protection agreed to by the Hayward Fire Department and the developer. This project can be defined as a highly protected, suburban risk, based upon the mitigated fire risk. The protection set forth for this project reflects a new standard of protection for wildland-urban interface projects.

A " Highly Protected Suburban Risk" is one that includes the following:

- NFPA 13-D fire sprinklers; modified and with a 4 head calculation, in all occupancies. Coverage to include attics, garage, and enclosed, integral porches. Alarm bell with indicating light to be located on front wall of structure.
- Approved Class "A" roof system.
- Set backs and building separations to City urban/wildland interface standards.
- Construction and window glazing which complies with and exceeds the City's Urban/Wildland interface guidelines.
- An approved Fuel Management Plan and maintenance program.
- Roads designed and constructed to City Fire Department requirements.
- Fire flow and duration in compliance the State Fire Code Appendix 111-A, and in addition to peak domestic demand. Minimum flow is 2,010 gpm for 2 hours, at a minimum 20 psi residual, and as needed to properly supply sprinklers.
- Fire hydrants placed at 500' intervals or less.
- Gravity feed water system in compliance with National Fire Protection Association and City standards (not reliant on fire pumps).
- Electrically powered smoke detectors installed in all dwellings.
- Emergency vehicle access roads.
- Fire truck access to unmodified open space.
- New Type III interface engine at closest fire station (one time market value cost; shared with other projects; cost not to exceed \$300,000).
- Modifications to Station 5 to house new Type III engine (cost shared with other projects; cost not to exceed \$300,000; one time cost).

9. Emergency Medical Services:

The fire department standard for response to emergency medical (EMS) calls is 5 minutes. This equals approximately 1.5 miles, assuming the 2 minutes to receive an alarm and begin to respond and a driving speed of 30 mph. This is based upon the need to arrive within 4 to 6 minutes of cessation of heart action or breathing. The objective is to a high likelihood of successful recovery and discharge from the hospital.

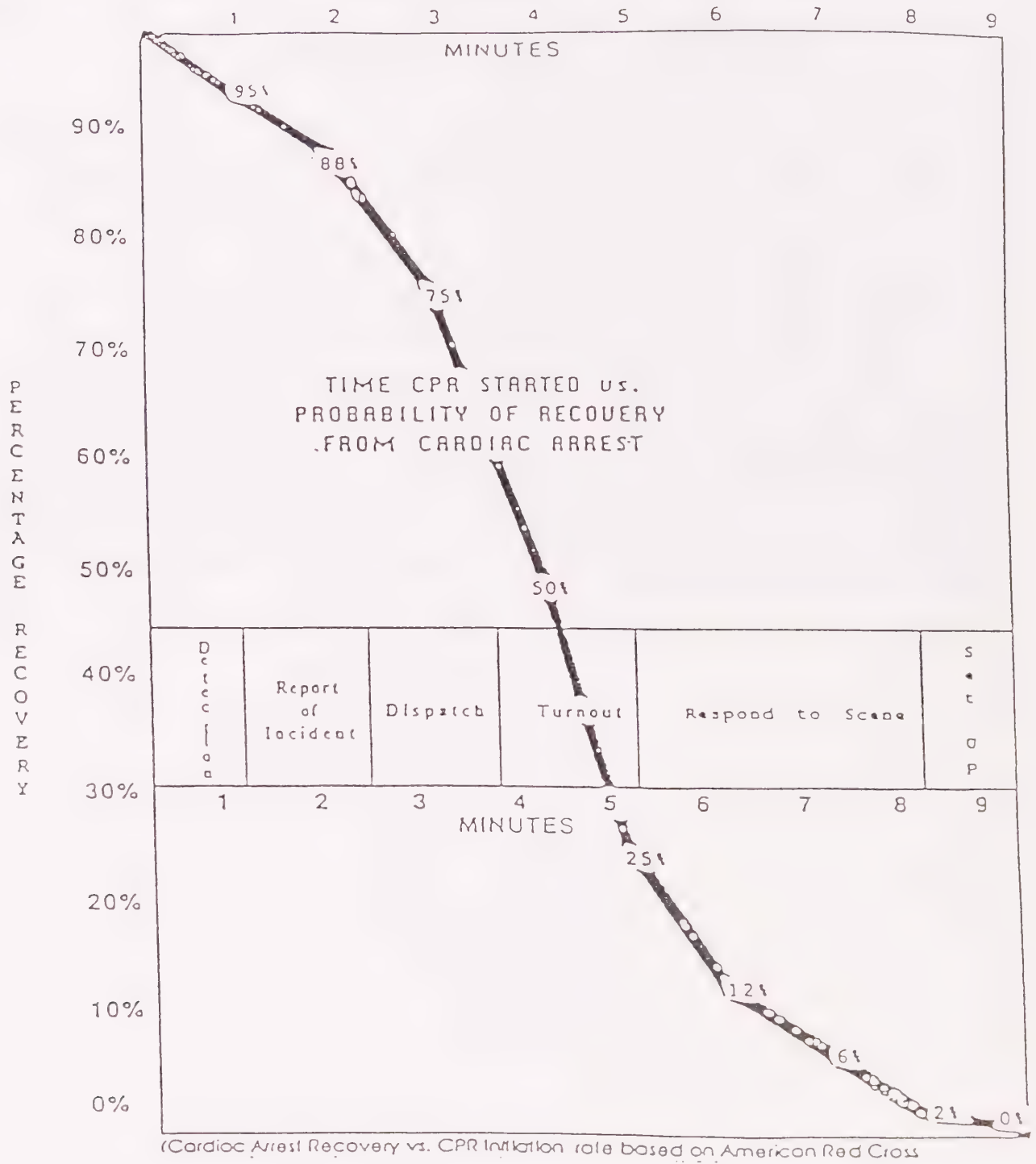
Refer to the illustration on the following page regarding response time versus recovery rates.

Most calls responded to by fire departments are for Emergency Medical Services (EMS). This is because of intensified efforts in recent years, by fire departments, to prevent fires. 70 to 80% of the call volume of most fire departments is for EMS calls. Most of these EMS calls occur in downtown areas, low income areas, rented occupancies, multi-family occupancies, and on streets and highways.

The Hayward stations in the older, downtown areas are very busy companies, mostly for EMS calls. For example, as stated earlier, stations 1 and 2 each have an average of 8 calls per day. On average, each Hayward station has about 5 calls per day, which is average for a community of this size. However, station 5 in the Walpert Ridge area has about 1 call every three days, mostly for medical aid. This is a very inactive fire station relative to incident frequency. Station 8, in the Fairview area, is the second slowest station in Hayward. It responds to approximately 1.5 calls per day. The increase in calls can probably be attributed to the fact that Fairview is an older area than the Walpert Ridge area, and generally not as affluent. This is an interesting statistic and is a common occurrence in many communities.

For the most part, occupants of residences in newer, higher value, areas such as Walpert Ridge tend to not be high consumers of emergency services. This is because of life styles, assumption of personal responsibility for their actions, education, and the care taken of their property. They also do not tend to use the fire department or ambulance service as a mobile doctor, or for a free ride to the hospital. These occupants are generally not involved in violence, drug abuse, property crimes, or other anti social behavior.

The fire engine and crew will be the first responders to EMS calls and will be housed at Fire Station 5; within 1.6 driving miles of all homes in this project.



10. Summary of Protection For This Project:

1. *Construction in compliance with City Urban/Wildland Interface regulations.*
2. *Residential sprinkler systems; NFPA 13-D modified/4 head calc.*
3. *Electrically powered smoke detectors.*
4. *Fuel Management Plan to city approval.*
5. *Water system to City approval.*
6. *Road system to City approval.*
7. *Emergency vehicle access roads.*
8. *Fire truck access to unmodified open space.*
9. *Type III interface fire engine at Station 5.*
10. *All homes within 1.6 miles driving distance from Station 5.*

Proper implementation and ongoing maintenance of the provisions in this plan will result in a Highly Protected Suburban Risk. This plan, when approved as signified on the signature page in front of this document, shall be considered as encompassing all present and future City of Hayward requirements for this project, relative to fire protection and EMS. Final approvals are, of course, subject to review and approval of detailed plans.

APPENDIX E:
CEQA STANDARDS FOR EIR ADEQUACY

According to Section 15151 of the CEQA Guidelines, the standards for Adequacy of an EIR are as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

APPENDIX F:
CEQA DEFINITION OF "MITIGATION"

According to Section 15370 of the CEQA EIR Guidelines, the term "mitigation" includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impacts by replacing or providing substitute resources or environments.

APPENDIX G. SEIR AUTHORS

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